1 Identification

- · Product identifier
- · Product Name: <u>3-Methylpentane</u>
- · Part Number: S-2530
- · Application of the substance / the mixture Certified Reference Material
- · Details of the supplier of the safety data sheet · Manufacturer/Supplier: SPEX CertiPrep, LLC. 203 Norcross Ave, Metuchen, NJ 08840 USA
- · Information department: product safety department · Emergency telephone number: Emergency Phone Number (24 hours) CHEMTREC (800-424-9300) Outside US: 703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture



Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS06 Skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.



GHS08 Health hazard

STOT SE 1 H370 Causes damage to organs.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



GHS06

- · Signal word Danger
- · Hazard-determining components of labeling:
- methanol · Hazard statements
- H225 Highly flammable liquid and vapor.
- H331 Toxic if inhaled.
- H370 Causes damage to organs.
- · Precautionary statements
- If medical advice is needed, have product container or label at hand.
- Keep out of reach of children.
- Read label before use.

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

- Use explosion-proof electrical/ventilating/lighting/equipment.
- Do not breathe dust/fume/gas/mist/vapors/spray.
- If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

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Product Name: 3-Methylpentane	
· Classification system: · NFPA ratings (scale 0 - 4)	(Contd. of page 1)
$\begin{array}{c} \textbf{Health} = 1\\ Fire = 3\\ Reactivity = 0 \end{array}$	
· HMIS-ratings (scale 0 - 4)	
HEALTH1FIRE3Fire = 3REACTIVITY 0	
· Other hazards · Results of PBT and vPvB assessment	
• <i>PBT:</i> Not applicable. • <i>vPvB:</i> Not applicable.	
3 Composition/information on ingredients	

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

67-56-1 methanol

- · Chemical identification of the substance/preparation
- 96-14-0 3-methylpentane

4 First-aid measures

· Description of first aid measures

- · General information:
- Immediately remove any clothing soiled by the product.
- Remove breathing apparatus only after contaminated clothing have been completely removed.
- In case of irregular breathing or respiratory arrest provide artificial respiration.
- · After inhalation:
- Supply fresh air or oxygen; call for doctor.
- In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: Do not give anything to eat or drink Do not induce vomitting
- · Information for Doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- Special hazards arising from the substance or mixture During heating or in case of fire poisonous gases are produced.
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Mount respiratory protective device. Wear protective equipment. Keep unprotected persons away.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

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Product Name: 3-Methylpentane

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	(Contd. of page 2)
· Reference to other sections	(Conta. of page 2)
See Section 7 for information on safe handling.	
See Section 8 for information on personal protection equipment.	
See Section 13 for disposal information.	
· Protective Action Criteria for Chemicals	
• PAC-1:	
67-56-1 methanol	530 ppm
96-14-0 3-methylpentane	1,000 ppm
· PAC-2:	
67-56-1 methanol	2,100 ppm
96-14-0 3-methylpentane	11000** ppm
· PAC-3:	
67-56-1 methanol	7200* ppm
96-14-0 3-methylpentane	66000*** ppm

7 Handling and storage

- · Handling:
- \cdot Precautions for safe handling
- Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care. Prevent formation of aerosols.
- Information about protection against explosions and fires: Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions:
- Keep receptacle tightly sealed.
- Store in cool, dry conditions in well sealed receptacles.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- · Control parameters

· Com	ponents with limit values that require monitoring at the workplace:
67-5	6-1 methanol
PEL	Long-term value: 260 mg/m ³ , 200 ppm
REL	Short-term value: 325 mg/m ³ , 250 ppm
	Long-term value: 260 mg/m³, 200 ppm Skin
TLV	Short-term value: 328 mg/m³, 250 ppm
	Long-term value: 262 mg/m ³ , 200 ppm
	Skin; BEI
· Ingr	edients with biological limit values:
67-5	6-1 methanol
	15 mg/L
	Medium: urine Times and of shift
	Time: end of shift Parameter: Methanol (background, nonspecific)
	tional information: The lists that were valid during the creation were used as basis.
· Expa	osure controls
	onal protective equipment:
	er al protective and hygienic measures: Do away from foodstuffs, beverages and feed.
	ediately remove all soiled and contaminated clothing.
	h hands before breaks and at the end of work.
Store	e protective clothing separately.
	(Contd. on page 4)

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Product Name: 3-Methylpentane

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and c	chemical properties	
· General Information		
· Appearance: Form:	Liquid	
Color:	According to product specification	
· Odor:	<i>Characteristic</i>	
· Odour Threshold:	Not applicable.	
· pH-value:	Not applicable.	
· Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	64.7 °C (148.5 °F)	
· Flash point:	< 23 °C (<73.4 °F)	
· Flammability (solid, gaseous):	Not applicable.	
· Ignition temperature:	455 °C (851 °F)	
• Decomposition temperature:	Not applicable.	
• Auto igniting:	Product is not selfigniting.	
• Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.	
· Explosion limits:		
Lower:	5.5 Vol %	
Upper:	44 Vol %	
· Vapor pressure at 20 °C (68 °F):	128 hPa (96 mm Hg)	
· Density at 20 °C (68 °F)	0.78987 g/cm ³ (6.59147 lbs/gal)	
· Relative density	Not applicable.	
• Vapor density	Not applicable.	
· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
· Partition coefficient (n-octanol/wate	er): Not applicable.	
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
· Solvent content:		
Organic solvents:	99.9 %	
		(Contd. on page 5)
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Product Name: 3-Methylpentane

		(Contd. of page 4)
VOC content:	99.90 %	
Solids content: • Other information	0.0 % No further relevant information available.	

10 Stability and reactivity

· Reactivity No further relevant information available.

- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- $\cdot \textit{Incompatible materials: } No \ further \ relevant \ information \ available.$
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- \cdot Information on toxicological effects
- Acute toxicity:

· LD/LC50 values that are relevant for classification:

67-56-1 methanol

Oral LD50 5,628 mg/kg (rat)

- Dermal LD50 15,800 mg/kg (rabbit)
- · Primary irritant effect:
- on the eye: No irritating effect.
- \cdot Sensitization: No sensitizing effects known.
- Additional toxicological information:
- The product shows the following dangers according to internally approved calculation methods for preparations:
- Toxic
- · Carcinogenic categories
- \cdot IARC (International Agency for Research on Cancer)
- None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

- · OSHA-Ca (Occupational Safety & Health Administration)
- None of the ingredients is listed.

12 Ecological information

- · Toxicity
- Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:
- Water hazard class 1 (Self-assessment): slightly hazardous for water
- Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

• Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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Product Name: 3-Methylpentane

• Uncleaned packagings: • Recommendation: Disposal must be made according to official regulations.

Transport information	
UN-Number DOT, ADR, IMDG, IATA	UN1230
UN proper shipping name DOT ADR IMDG, IATA	Methanol 1230 Methanol METHANOL
Transport hazard class(es)	
DOT	
Class Label	3 Flammable liquids 3, 6.1
ADR	
Class Label	3 Flammable liquids 3+6.1
IMDG	5+0.1
Class Label	3 Flammable liquids 3/6.1
IATA Vertical Class Label	3 Flammable liquids 3 (6.1)
Packing group DOT, ADR, IMDG, IATA	11
Environmental hazards:	Not applicable.
Special precautions for user Danger code (Kemler): EMS Number: Stowage Category Stowage Code	Warning: Flammable liquids 336 F-E,S-D B SW2 Clear of living quarters.
Transport in bulk according to Annex II of MARP Code	POL73/78 and the IBC Not applicable.
Transport/Additional information:	
ADR Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
	(Contd. on page

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· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
UN "Model Regulation":	UN 1230 METHANOL, 3 (6.1), II

15 Regulatory information

· Safety, health and	environmental	regulations/	legislation	specific	for the	substance	or mixture

· Sara	
· Section 313 (Specific toxic chemical listings):	
67-56-1 methanol	
· TSCA (Toxic Substances Control Act):	
All ingredients are listed.	
· Proposition 65	
· Chemicals known to cause cancer:	
None of the ingredients is listed.	
· Chemicals known to cause reproductive toxicity for females:	
None of the ingredients is listed.	
· Chemicals known to cause reproductive toxicity for males:	
None of the ingredients is listed.	
· Chemicals known to cause developmental toxicity:	
67-56-1 methanol	
· Carcinogenic categories	
· EPA (Environmental Protection Agency)	
None of the ingredients is listed.	
· TLV (Threshold Limit Value established by ACGIH)	
None of the ingredients is listed.	
·NIOSH-Ca (National Institute for Occupational Safety and Health)	
None of the ingredients is listed.	

• GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



· Signal word Danger

- · Hazard-determining components of labeling:
- methanol
- · Hazard statements
- H225 Highly flammable liquid and vapor.
- H331 Toxic if inhaled.
- H370 Causes damage to organs.
- · Precautionary statements

If medical advice is needed, have product container or label at hand.

- Keep out of reach of children.
- Read label before use.

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

Use explosion-proof electrical/ventilating/lighting/equipment.

Do not breathe dust/fume/gas/mist/vapors/spray.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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v	on is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not ally valid contractual relationship.
· Department iss	suing SDS: product safety department
· Contact:	6 . . <i>1</i>
SPEX CertiPre	
,	
1-732-549-714	
· Date of prepare	ation / last revision 11/21/2018 / -
· Abbreviations a	and acronyms:
	éen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
	Il Maritime Code for Dangerous Goods
DOT: US Departmer	
	Air Transport Association
	Conference of Governmental Industrial Hygienists
	Inventory of Existing Commercial Chemical Substances
	List of Notified Chemical Substances
	tracts Service (division of the American Chemical Society) ve Protection Association (USA)
	e Froiection Association (USA) Jaterials Identification System (USA)
	aueraus auenijičanon system (USA) nic Compounds (USA, EU)
LC50: Lethal concer	
LD50: Lethal dose, 5	
	paccumulative and Toxic
vPvB: very Persisten	nt and very Bioaccumulative
NIOSH: National In.	stitute for Occupational Safety
OSHA: Occupationa	
TLV: Threshold Lim	
PEL: Permissible Ex	
REL: Recommended	
BEI: Biological Exp	
	nable liquids – Category 2
	toxicity – Category 3 ; target organ toxicity (single exposure) – Category 1
STOT SE T: Specific	: urget organ toxicity (single exposure) = Calegory 1