# SAFETY DATA SHEET



GC/MS Inst Checkout Std Kit - HES 2.0, Part Number 5191-4560

#### SECTION 1: Identification of the substance/mixture and of the company/ undertaking **1.1 Product identifier Product name** : GC/MS Inst Checkout Std Kit - HES 2.0, Part Number 5191-4560 Part no. : 5191-4560 1.2 Relevant identified uses of the substance or mixture and uses advised against **Identified uses** : Reagents and Standards for Analytical Chemistry Laboratory Use 3 x 1mL 1 fg/µL OFN GC/MS Checkout Standard 5191-4560-1 **Uses advised against** : None known. 1.3 Details of the supplier of the safety data sheet Agilent Technologies Deutschland GmbH Hewlett-Packard-Str. 8 76337 Waldbronn Germany 0800 603 1000

e-mail address of person : pdl-msds\_author@agilent.com responsible for this SDS

#### 1.4 Emergency telephone number

Emergency telephone : CHEMTREC®: +(44)-870-8200418 number (with hours of operation)

## **SECTION 2: Hazards identification**

2.1 Classification of t	the substance or mixture	
<b>Product definition</b>	: Mixture	
<b>Classification accor</b>	rding to Regulation (EC) No. 1272/2008 [CLP/GHS]	
H225	FLAMMABLE LIQUIDS	Category 2
H315	SKIN CORROSION/IRRITATION	Category 2
H336	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	Category 3
	(Narcotic effects)	
H304	ASPIRATION HAZARD	Category 1
H400	SHORT-TERM (ACUTE) AQUATIC HAZARD	Category 1
H410	LONG-TERM (CHRONIĆ) AQUATIC HAZARD	Category 1

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

## 2.2 Label elements Hazard pictograms Signal word Hazard statements Danger H225 - Highly flammable liquid and vapour. H304 - May be fatal if swallowed and enters airways. H315 - Causes skin irritation. H336 - May cause drowsiness or dizziness. H410 - Very toxic to aquatic life with long lasting effects.

## **SECTION 2: Hazards identification**

Precautionary statements         Prevention       : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P273 - Avoid release to the environment.         Response       : P391 - Collect spillage. P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.         Storage       : P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.         Disposal       : P501 - Dispose of contents and container in accordance with all local, regional, nat and international regulations.         Hazardous ingredients       : 2,2,4-trimethylpentane         Supplemental label elements       : Not applicable.         Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles       : Not applicable.
sources. No smoking.         P273 - Avoid release to the environment.         Person se         P391 - Collect spillage.         P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.         Storage       P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.         Disposal       P501 - Dispose of contents and container in accordance with all local, regional, nat and international regulations.         Hazardous ingredients       2,2,4-trimethylpentane         Supplemental label elements       Not applicable.         Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances,       Not applicable.
Storage       :       P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.         Storage       :       P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.         Disposal       :       P501 - Dispose of contents and container in accordance with all local, regional, nat and international regulations.         Hazardous ingredients       :       2,2,4-trimethylpentane         Supplemental label elements       :       Not applicable.         Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances,       :       Not applicable.
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Hazardous ingredients       : 2,2,4-trimethylpentane         Supplemental label       : Not applicable.         elements       : Not applicable.         Annex XVII - Restrictions       : Not applicable.         on the manufacture,       : Not applicable.         placing on the market       : Not applicable.         and use of certain       : dangerous substances,
Supplemental label       : Not applicable.         elements       Annex XVII - Restrictions       : Not applicable.         on the manufacture,       placing on the market       and use of certain         dangerous substances,       .       .
elements Annex XVII - Restrictions : Not applicable. on the manufacture, placing on the market and use of certain dangerous substances,
on the manufacture, placing on the market and use of certain dangerous substances,
Special packaging requirements
Tactile warning of       : Not applicable.         danger
2.3 Other hazards
Product meets the       : This mixture does not contain any substances that are assessed to be a PBT or a vertice of the second se
Other hazards which do not result in classificationStatic accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapour may cause fire or explosion.

## **SECTION 3: Composition/information on ingredients**

3.2 Mixtures	: Mixture					
Product/ingredient name	Identifiers %		Classification	Specific Conc. Limits, M-factors and ATEs	Туре	
2,2,4-trimethylpentane	EC: 208-759-1 CAS: 540-84-1	≥90	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 See Section 16 for the full text of the H statements declared above.	M [Acute] = 1 M [Chronic] = 1	[1]	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Туре

[1] Substance classified with a health or environmental hazard

Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4: First aid measures

4.1 Description of first aid I	me	asures
Eye contact	:	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	:	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	:	Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Protection of first-aiders	:	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

## 4.2 Most important symptoms and effects, both acute and delayed

Potential acute health	effects
Eye contact	: No known significant effects or critical hazards.
Inhalation	: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Skin contact	: Causes skin irritation.
Ingestion	: Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.
Over-exposure signs/s	<u>ymptoms</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: Adverse symptoms may include the following: nausea or vomiting
4.3 Indication of any imr	nediate medical attention and special treatment needed
Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

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## **SECTION 4: First aid measures**

Specific treatments : No specific treatment.

## **SECTION 5: Firefighting measures**

5.1 Extinguishing media		
Suitable extinguishing media	:	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
Unsuitable extinguishing media	:	Do not use water jet.
5.2 Special hazards arising	fro	m the substance or mixture
Hazards from the substance or mixture	:	Highly flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly-grounded containers. Static accumulation may be significantly increased by the presence of small quantities of water or other contaminants. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous combustion products	:	Decomposition products may include the following materials: carbon dioxide carbon monoxide
5.3 Advice for firefighters		
Special precautions for fire-fighters	:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire- fighters	:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions	: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

#### 6.3 Methods and material for containment and cleaning up

## **SECTION 6: Accidental release measures**

Methods for cleaning up	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal contrainer. Dispose of via a licensed waste disposal contractor.
6.4 Reference to other sections	<ul> <li>See Section 1 for emergency contact information.</li> <li>See Section 8 for information on appropriate personal protective equipment.</li> <li>See Section 13 for additional waste treatment information.</li> </ul>

## **SECTION 7: Handling and storage**

## 7.1 Precautions for safe handling

The foundations for sure in	
Protective measures	<ul> <li>Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Restrict flow velocity according to API 2003 (2008), NFPA 77 (2007), and Laurence Britton, "Avoiding Static Ignition Hazards in Chemical Operations". To reduce potential for static discharge, ensure that all equipment is properly grounded and bonded and meets appropriate electrical classification requirements.</li> </ul>
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before

Lating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## 7.2 Conditions for safe storage, including any incompatibilities

Storage

: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Seveso Directive - Reporting thresholds

# Danger criteriaCategoryNotification and MAPP<br/>thresholdSafety report thresholdP5c<br/>E15000 tonne<br/>100 tonne50000 tonne<br/>200 tonne

## 7.3 Specific end use(s) Recommendations

: Industrial applications, Professional applications.

Industrial sector specific : Not available. solutions

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## **SECTION 8: Exposure controls/personal protection**

## 8.1 Control parameters

## **Occupational exposure limits**

No exposure limit value known.

## **Biological exposure indices**

No exposure indices known.

# Recommended monitoring procedures

: Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

## **DNELs/DMELs**

Product/ingredient name	Туре	Exposure	Value	Population	Effects
2,2,4-trimethylpentane	DNEL	Long term Inhalation	608 mg/m³	General population	Systemic
	DNEL	Long term Oral	699 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	699 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	773 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	2035 mg/ m³	Workers	Systemic

**PNECs** 

No PNECs available

8.2 Exposure controls		
Appropriate engineering controls	:	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Individual protection meas	ure	<u>)S</u>
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin protection		
Hand protection	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

## **SECTION 8: Exposure controls/personal protection**

Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.	
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.	
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other importan aspects of use.	
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.	

## **SECTION 9: Physical and chemical properties**

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

## 9.1 Information on basic physical and chemical properties

## Appearance

Appearance				
Physical state	:	Liquid. [Clear.]		
Colour	:	Colourless.		
Odour	1	Gasoline-like		
Odour threshold	:	Not available.		
Melting point/freezing point	:	Not available.		
Initial boiling point and boiling range	:	98 to 99°C		
Flammability	:	Not applicable.		
Upper/lower flammability or explosive limits	:	Lower: 1% Upper: 6%		
Flash point	:	Closed cup: -12.22°C		
Auto-ignition temperature	÷	396°C		
Decomposition temperature	1	Not available.		
рН	:	Not available.		
		Not available.		
Viscosity	4	NUL avallable.		
Viscosity Solubility(ies)	1	Media	Result	
	:		Result Insoluble	
		Media		
Solubility(ies)	:	<mark>Media</mark> water		
Solubility(ies) Miscible with water Partition coefficient: n-	:	Media water No.		
Solubility(ies) Miscible with water Partition coefficient: n- octanol/water	: :	<mark>Media</mark> water No. Not applicable.		
Solubility(ies) Miscible with water Partition coefficient: n- octanol/water Vapour pressure	: : :	Media water No. Not applicable. 5.5 kPa (41 mm Hg)		
Solubility(ies) Miscible with water Partition coefficient: n- octanol/water Vapour pressure Evaporation rate	: : :	Media water No. Not applicable. 5.5 kPa (41 mm Hg) Not available.		
Solubility(ies) Miscible with water Partition coefficient: n- octanol/water Vapour pressure Evaporation rate Relative density	: : :	Media water No. Not applicable. 5.5 kPa (41 mm Hg) Not available. 0.69		
Solubility(ies) Miscible with water Partition coefficient: n- octanol/water Vapour pressure Evaporation rate Relative density Density	: : :	Media         water         No.         Not applicable.         5.5 kPa (41 mm Hg)         Not available.         0.69         0.69 g/cm³		
Solubility(ies) Miscible with water Partition coefficient: n- octanol/water Vapour pressure Evaporation rate Relative density Density Vapour density		Media         water         No.         Not applicable.         5.5 kPa (41 mm Hg)         Not available.         0.69         0.69 g/cm³         Not available.		

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## **SECTION 9: Physical and chemical properties**

## Particle characteristics

Median particle size : Not applicable.

## 9.2 Other information

No additional information.

SECTION 10: Stability and reactivity		
10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.	
10.2 Chemical stability	: The product is stable.	
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.	
10.4 Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.	
10.5 Incompatible materials	: Reactive or incompatible with the following materials: oxidising materials	
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.	

## **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

## Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2,2,4-trimethylpentane	LC50 Inhalation Vapour	Rat - Male, Female Rat - Male, Female	>33.52 mg/l >5000 mg/kg	4 hours -

#### Acute toxicity estimates

N/A

Irritation/Corrosion		
<b>Conclusion/Summary</b>	:	Not available.
<u>Sensitiser</u>		
Conclusion/Summary	:	Not available.
Mutagenicity		
Conclusion/Summary	:	Not available.
<b>Carcinogenicity</b>		
Conclusion/Summary	:	Not available.
Reproductive toxicity		
Conclusion/Summary	:	Not available.
Teratogenicity		
<b>Conclusion/Summary</b>	:	Not available.
• • • · · · · ·		

## Specific target organ toxicity (single exposure)

sure
Narcotic effects

## Specific target organ toxicity (repeated exposure)

## **SECTION 11: Toxicological information**

## Not available.

#### **Aspiration hazard**

	ct/ingredient name	Result		
GC/MS Inst Checkout Std Kit - HES 2.0, Part Number 5191-4560 2,2,4-trimethylpentane		560 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1		
Information on likely routes of exposure	: Routes of entry anticipated: Or	ral, Dermal, Inhalation, Eyes.		
Potential acute health eff	ects			
Inhalation	: Can cause central nervous system dizziness.	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.		
Ingestion	: Can cause central nervous systematics airways.	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.		
Skin contact	: Causes skin irritation.			
Eye contact	: No known significant effects of			
	physical, chemical and toxicolog			
Inhalation	: Adverse symptoms may incluc nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness	le the following:		
Ingestion	: Adverse symptoms may incluc nausea or vomiting	le the following:		
Skin contact	: Adverse symptoms may incluc irritation redness	le the following:		
Eye contact	: Adverse symptoms may incluc pain or irritation watering redness	le the following:		
Delayed and immediate e	effects as well as chronic effects	from short and long-term exposure		
Short term exposure				
Potential immediate effects	: Not available.			
Potential delayed effects	: Not available.			
Long term exposure				
Potential immediate effects	: Not available.			
Potential delayed effects	: Not available.			
Potential chronic health	effects			
Conclusion/Summary	: Not available.			
General	: No known significant effects o	r critical hazards.		
Carcinogenicity	-	: No known significant effects or critical hazards.		
Mutagenicity	: No known significant effects o			
Reproductive toxicity	: No known significant effects o	r critical hazards.		
<b>1.2 Information on other</b> <b>11.2.1 Endocrine disrupt</b> Not available.				

## **SECTION 11: Toxicological information**

Not available.

## **SECTION 12: Ecological information**

## 12.1 Toxicity

**Conclusion/Summary** : Not available.

## 12.2 Persistence and degradability

Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
2,2,4-trimethylpentane	-	-	Inherent

## 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
2,2,4-trimethylpentane	4.08	231	Low

#### 12.4 Mobility in soil

Soil/water partition coefficient (Koc)	: Not available.
Mobility	: Not available.

#### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## 12.6 Endocrine disrupting properties

Not available.

## **12.7 Other adverse effects**

No known significant effects or critical hazards.

## **SECTION 13: Disposal considerations**

13.1 Waste treatment met	nods
Product	
Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
Hazardous waste	: The classification of the product may meet the criteria for a hazardous waste.
Packaging	
Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
Special precautions	: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## **SECTION 14: Transport information**

	ADR/RID	IMDG	ΙΑΤΑ
14.1 UN number or ID number	UN1262	UN1262	UN1262
14.2 UN proper shipping name	OCTANES solution	OCTANES solution	Octanes solution
14.3 Transport hazard class(es)			3
14.4 Packing group	II	11	11
14.5 Environmental hazards	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

## **Additional information**

Remarks : De minimis quantities

ADR/RID	<ul> <li>The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.</li> <li><u>Hazard identification number</u> 33</li> <li><u>Limited quantity</u> 1 L</li> <li><u>Tunnel code</u> (D/E)</li> </ul>
IMDG	<ul> <li>The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.</li> <li>Emergency schedules F-E, S-E</li> </ul>
ΙΑΤΑ	<ul> <li>The environmentally hazardous substance mark may appear if required by other transportation regulations.</li> <li><u>Quantity limitation</u> Passenger and Cargo Aircraft: 5 L. Packaging instructions: 353.</li> <li>Cargo Aircraft Only: 60 L. Packaging instructions: 364. Limited Quantities - Passenger Aircraft: 1 L. Packaging instructions: Y341.</li> </ul>
14.6 Special precautions for user	: <b>Transport within user's premises:</b> always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
14.7 Transport in bulk according to IMO instruments	: Not available.

## **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU Regulation (EC) No. 1907/2006 (REACH)</u>

## Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

# Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Product / Ingredient name	Identifiers	Designation [Usage]
GC/MS Inst Checkout Std Kit - HES 2.0, Part Number 5191-4560		3

## **SECTION 15: Regulatory information**

Label

: Not applicable.

#### **Other EU regulations**

Ozone depleting substances (1005/2009/EU) Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

## Seveso Directive

This product is controlled under the Seveso Directive.

## Danger criteria

Category

P5c E1

## International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

## **Montreal Protocol**

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

## Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

## **UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

## **Inventory list**

inventory not	
Australia	: Not determined.
Canada	: Not determined.
China	: Not determined.
Eurasian Economic Union	: Russian Federation inventory: All components are listed or exempted.
Japan	: Japan inventory (CSCL): Not determined. Japan inventory (ISHL): Not determined.
New Zealand	: Not determined.
Philippines	: Not determined.
Republic of Korea	: Not determined.
Taiwan	: All components are listed or exempted.
Thailand	: Not determined.
Turkey	: Not determined.
United States	: Not determined.
Viet Nam	: All components are listed or exempted.
15.2 Chemical safety assessment	: This product contains substances for which Chemical Safety Assessments might still be required.

## **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

Abbreviations and : acronyms	ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement N/A = Not available PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number vPvB = Very Persistent and Very Bioaccumulative
	vPvB = Very Persistent and Very Bioaccumulative

#### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Flam. Liq. 2, H225	On basis of test data
Skin Irrit. 2, H315	Calculation method
STOT SE 3, H336	Calculation method
Asp. Tox. 1, H304	Expert judgment
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method

#### Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

#### Full text of classifications [CLP/GHS]

Aquatic Acute 1 Aquatic Chronic 1 Asp. Tox. 1 Flam. Liq. 2 Skin Irrit. 2 STOT SE 3	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1 ASPIRATION HAZARD - Category 1 FLAMMABLE LIQUIDS - Category 2 SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
Date of issue/ Date of : ( revision	/04/2024

Date of previous issue : No previous validation

: 1

## Version

#### Notice to reader

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