

SAFETY DATA SHEET **US MX18 K2**

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200.

1. Identification	
Product identifier	
Product name	US MX18 K2
Product number	PF010047
Recommended use of the che	mical and restrictions on use
Application	Use as a fuel
Uses advised against	Use only for intended applications.
Details of the supplier of the s	afety data sheet
Supplier	Haltermann Carless US Inc. 6000 Fairview Road – Suite 1200 Charlotte 28210, NC – USA Tel : +1 (248) 422 6548 FDS@h-c-s-group.com
Contact Person	FDS@h-c-s-group.com
Manufacturer	Haltermann Carless France S.A.S Zone d'Activities de la Baudriere no 1 27520 BOURGTHEROULDE - INFREVILLE FRANCE +33(0)232131450 +33(0)232131451 FDS@h-c-s-group.com
Emergency telephone number	
Emergency telephone	24/7 Worldwide Emergency Telephone: CHEMTREC on +1-703-527-3887 / +1-800-424- 9300.
National emergency telephone number	 24/7 Worldwide Emergency Telephone Number for Hazardous Materials Incident, Spill, Leak, Fire, Exposure or Accident: CHEMTREC on +1 703-741-5970 / +1-800-424-9300.
2. Hazard(s) identification	
Classification of the substance	e or mixture
Physical hazards	Flam. Liq. 2 - H225
Health hazards	Skin Irrit. 2 - H315 Repr. 2 - H361d STOT SE 3 - H336 Asp. Tox. 1 - H304
Environmental hazards	Aquatic Acute 2 - H401 Aquatic Chronic 2 - H411
Human health	Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.
Environmental	The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

Physicochemical

Vapors are heavier than air and may travel along the floor and accumulate in the bottom of containers. Vapors may be ignited by a spark, a hot surface or an ember. Vapors may form explosive mixtures with air.

Label elements

Hazard symbols





Signal word	Danger
Hazard statements	H225 Highly flammable liquid and vapor. H315 Causes skin irritation. H361d Suspected of damaging the unborn child. H336 May cause drowsiness or dizziness. H304 May be fatal if swallowed and enters airways. H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	 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 and hot surfaces. No smoking. P240 Ground/ bond container and receiving equipment. P241 Use explosion-proof electrical equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P261 Avoid breathing vapor/ spray. P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301+P310 If swallowed: Immediately call a poison center/ doctor. P302+P352 If on skin: Wash with plenty of water. P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing. P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing. P302+P313 If exposed or concerned: Get medical advice/ attention. P312 Call a poison center/ doctor if you feel unwell. P312 Specific treatment (see medical advice on this label). P332+P343 If skin irritation occurs: Get medical advice/ attention. P362+P345 Take off contaminated clothing and wash it before reuse. P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish. P391 Collect spillage. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P403+P235 Store in a well-ventilated place. Keep cool. P403+P235 Store in a well-ventilated place. Keep cool
Contains	Gasoline, DI-ISOPROPYL ETHER

Contains Gasoline, DI-ISOPROPYL ETHER

Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

3. Composition/information on ingredients

Mixtures

Gasoline >70-<90% CAS number: 86290-81-5 Classification Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 Repr. 2 - H361d STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Acute 2 - H401 Aquatic Chronic 2 - H411 **DI-ISOPROPYL ETHER** >10-<30% CAS number: 108-20-3 Classification Flam. Lig. 2 - H225 STOT SE 3 - H336 The full text for all hazard statements is displayed in Section 16. 4. First-aid measures Description of first aid measures General information Remove affected person from source of contamination. Place unconscious person on their side in the recovery position and ensure breathing can take place. Inhalation Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues. Ingestion Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately. Skin Contact Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues. Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues. Most important symptoms and effects, both acute and delayed Inhalation Vapors in high concentrations are anesthetic. Vapors in high concentrations are narcotic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Central nervous system depression. Ingestion Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis. Skin contact Skin irritation. Prolonged contact may cause redness, irritation and dry skin. Eye contact No specific symptoms known. Indication of immediate medical attention and special treatment needed Notes for the doctor Treat symptomatically. 5. Fire-fighting measures

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Extinguishing media

Conditions for safe storage in	exposure.
Advice on general occupational hygiene	Good personal hygiene procedures should be implemented. For professional users only. Pregnant or breastfeeding women should not work with this product if there is any risk of
Usage precautions	Do not use in confined spaces without adequate ventilation and/or respirator. Eliminate all sources of ignition. Keep away from heat, sparks and open flame. Avoid spilling. Avoid inhalation of vapors/spray and contact with skin and eyes. Static electricity and formation of sparks must be prevented. Storage tanks and other containers must be grounded.
Precautions for safe handling	
7. Handling and storage	
Reference to other sections	For personal protection, see Section 8. For waste disposal, see Section 13.
Methods for cleaning up	Stop leak if safe to do so. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Absorb in vermiculite, dry sand or earth and place into containers. Collect and place in suitable waste disposal containers and seal securely.
Methods and material for conta	ainment and cleaning up
Environmental precautions Environmental precautions	Do not discharge into drains or watercourses or onto the ground. Avoid the spillage or runoff entering drains, sewers or watercourses.
Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet. Use suitable respiratory protection if ventilation is inadequate. No smoking, sparks, flames or other sources of ignition near spillage. Avoid inhalation of vapors and contact with skin and eyes. Provide adequate ventilation. Take precautionary measures against static discharges.
Personal precautions, protectiv	ve equipment and emergency procedures
6. Accidental release measure	s
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
Advice for firefighters Protective actions during firefighting	Avoid breathing fire gases or vapors. Use water to keep fire exposed containers cool and disperse vapors. Control run-off water by containing and keeping it out of sewers and watercourses.
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Oxides of carbon.
Specific hazards	Vapors are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Vapors may form explosive mixtures with air. Containers can burst violently or explode when heated, due to excessive pressure build-up.
Special hazards arising from the	ne substance or mixture
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

Conditions for safe storage, including any incompatibilities

Storage precautions	Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from heat, sparks and open flame. Store in a demarcated bunded area to prevent release to drains and/or watercourses.
Storage class	Flammable liquid storage.
Specific end uses(s)	
Specific end use(s)	The identified uses for this product are detailed in Section 1.

8. Exposure controls/Personal protection

Control parameters

Occupational exposure limits

Observe any occupational exposure limits for the product or ingredients.

Gasoline

Long-term exposure limit (8-hour TWA): ACGIH 300 ppm Short-term exposure limit (15-minute): ACGIH 500 ppm A3

DI-ISOPROPYL ETHER

Long-term exposure limit (8-hour TWA): ACGIH 250 ppm Short-term exposure limit (15-minute): ACGIH 310 ppm Long-term exposure limit (8-hour TWA): OSHA 500 ppm 2100 mg/m³

ACGIH = American Conference of Governmental Industrial Hygienists. A3 = Confirmed Animal Carcinogen with Unknown Relevance to Humans. OSHA = Occupational Safety and Health Administration.

Exposure controls

Protective equipment

Appropriate engineering controls	Provide adequate general and local exhaust ventilation. This product must not be handled in a confined space without adequate ventilation.
Personal protection	For professional users only.
Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with OSHA 1910.133.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. To protect hands from chemicals, gloves should comply with OSHA 1910.138 and be demonstrated to be impervious to the chemical and resist degradation. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.
Other skin and body protection	Wear suitable protective clothing as protection against splashing or contamination.

Hygiene measures	Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap and water if skin becomes contaminated. Do not smoke in work area. When using do not eat, drink or smoke. Pregnant or breastfeeding women should not work with this product if there is any risk of exposure.
Respiratory protection	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. If ventilation is inadequate, suitable respiratory protection must be worn. Half mask and quarter mask respirators with replaceable filter cartridges should comply with OSHA 1910.134. Wear a respirator fitted with the following cartridge: Gas filter, type AX.
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. Store in a demarcated bunded area to prevent release to drains and/or watercourses.

9. Physical and chemical properties

Information on basic physical and chemical propertiesAppearanceLiquid.

Color	Colorless.
Odor	Characteristic.
Odor threshold	Not available.
рН	Not available.
Melting point	<-60°C
Initial boiling point and range	40 - 120°C (ASTM D86)
Flash point	-60°C Closed cup. (Abel, IP170)
Evaporation rate	Not available.
Evaporation factor	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 1.4 % Upper flammable/explosive limit: 7.6 %
Vapor pressure	78 kPa @ 37.8°C (ASTM D5191)
Relative density	761 Kg/L @ 15°C (ASTM D4052)
Solubility(ies)	Not available.
Partition coefficient	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	Kinematic viscosity ≤ 20.5 mm²/s.
Explosive properties	There are no chemical groups present in the product that are associated with explosive properties.
Oxidizing properties	The product is highly flammable.
Other information	None.

10. Stability and reactivity	
Reactivity	The following materials may react with the product: Strong oxidizing agents.
Stability	Stable at normal ambient temperatures and when used as recommended. Avoid the following conditions: Heat, sparks, flames.
Possibility of hazardous reactions	Will not polymerize.
Conditions to avoid	Avoid heat, flames and other sources of ignition.
Materials to avoid	Strong oxidizing agents.
Hazardous decomposition products	Heating may generate the following products: Oxides of carbon.
11. Toxicological information	
Information on toxicological eff	fects
Toxicological effects	Information given is applicable to the major ingredient. Gasoline
Acute toxicity - oral Notes (oral LD∞)	LD₅₀ >5000 mg/kg, Oral, Rat (OECD 401) Conclusive data but not sufficient for classification.
Acute toxicity - dermal Notes (dermal LD∞)	LD₅₀ >2000 mg/kg, Dermal, Rabbit (OECD 402) Conclusive data but not sufficient for classification.
Acute toxicity - inhalation Notes (inhalation LC ₅₀)	LC50 >5610 mg/m³, Inhalation, Rat (OECD 403) Conclusive data but not sufficient for classification.
Skin corrosion/irritation Animal data	Irritating. (OECD 404)
Extreme pH	Not corrosive to skin. (OECD 404)
Serious eye damage/irritation Serious eye damage/irritation	Not irritating. (OECD 405)
Skin sensitization Skin sensitization	Buehler test - Guinea pig: Not sensitizing. (OECD 406)
<u>Germ cell mutagenicity</u> Genotoxicity - in vitro	Gene mutation:: Negative. (Method equivalent or similar to OECD 471) This substance has no evidence of mutagenic properties.
Genotoxicity - in vivo	Chromosome aberration: Negative. (OECD 475) This substance has no evidence of mutagenic properties. Although the data do not support classification of gasoline per se for genotoxic potential, there is a regulatory requirement to classify as genotoxic gasoline and naphtha streams containing >0.1% benzene
Carcinogenicity	

Carcinogenicity

Carcinogenicity	NOAEL ~10000 mg/m ³ , Inhalation, Rat (OECD 453) NOAEL 0.05 ml, Dermal, Mouse (OECD 451) The data do not support the classification of gasoline per se for carcinogenic potential, however there is a regulatory requirement to classify as carcinogenic gasoline and naphtha streams containing >0.1% benzene
Target organ for carcinogenicity	Kidneys Liver
Reproductive toxicity	
Reproductive toxicity - fertility	Two-generation study - NOAEC ≥20000 mg/m ³ , Inhalation, Rat F1 (OECD 416) It should be noted that, although the data do not support classification of gasoline per se for reproductive toxicity potential according to EU regulation (EC no. 1272/2008), there is a regulatory requirement to classify as reprotoxic gasoline and naphtha streams containing >3% toluene and / or n-hexane
Reproductive toxicity - development	Developmental toxicity: - NOAEL: 23900 mg/m ³ , Inhalation, Rat (OECD 414) It should be noted that, although the data do not support classification of gasoline per se for reproductive toxicity potential according to EU regulation (EC no. 1272/2008), there is a regulatory requirement to classify as reprotoxic gasoline and naphtha streams containing >3% toluene and / or n-hexane
Specific target organ toxicity -	repeated exposure
STOT - repeated exposure	Based on available data the classification criteria are not met.
Aspiration hazard Aspiration hazard	Kinematic viscosity \leq 20.5 mm ² /s. May be fatal if swallowed and enters airways.
Inhalation	Vapors in high concentrations are anesthetic. Vapors in high concentrations are narcotic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Central nervous system depression.
Ingestion	Harmful: may cause lung damage if swallowed. Pneumonia may be the result if vomited material containing solvents reaches the lungs.
Skin Contact	Irritating to skin. Not a skin sensitizer.
Eye contact	No specific health hazards known.
Route of exposure	Inhalation Oral Skin and/or eye contact
12. Ecological information	
Ecotoxicity	The product contains substances which are toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment. Information given is applicable to the major ingredient Gasoline.
Acute aquatic toxicity	
Acute toxicity - fish	LC50, 96 hours: 10 mg/l, Oncorhynchus mykiss (Rainbow trout) (OECD 203)
Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 4.5 mg/l, Daphnia magna (OECD 202)
Acute toxicity - aquatic plants	EC₅₀, 72 hours: 3.1 mg/l, Selenastrum capricornutum (OECD 201)
Acute toxicity - microorganisms	LL₅o, 72 hours: 15.41 mg/l, Tetrahymena pyriformis (QSAR modeled data)

Acute toxicity - terrestrial	Scientifically unjustified.
Chronic aquatic toxicity Chronic toxicity - fish early life stage	Read-across data. (OECD 211) NOELR, 21 days: 2.6 mg/l, Daphnia magna
Chronic toxicity - aquatic invertebrates	Read-across data. (OECD 211) NOELR, 21 days: 2.6 mg/l, Daphnia magna
Persistence and degradability	
Persistence and degradability	Inherently biodegradable.
Phototransformation	No information required.
Stability (hydrolysis)	Scientifically unjustified. The available data and weight of evidence demonstrate that this substance is resistant to hydrolysis because it lacks a functional group that is hydrolytically reactive. Therefore, this fate process will not contribute to a measurable degradable loss of this substance from the environment.
Biodegradation	Inherently biodegradable.
Bioaccumulative potential	
Bio-Accumulative Potential	Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.
Partition coefficient	Not available.
Mobility in soil	
Adsorption/desorption coefficient	Scientifically unjustified. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.
Henry's law constant	Not applicable. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.
Surface tension	No information required. Endpoint waived according to REACH Annex VII, IX or XI.
13. Disposal considerations	
Waste treatment methods	
General information	Waste is classified as hazardous waste. The generation of waste should be minimized or avoided wherever possible. External recovery, treatment, recycling and disposal of waste should comply with all applicable local and/or national regulations.
Disposal methods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Dispose of waste via a licensed waste disposal contractor.
Waste class	Waste is classified as hazardous waste.
14. Transport information	
UN Number	
UN No. (TDG)	1203
UN No. (IMDG)	1203
UN No. (ICAO)	1203
UN No. (DOT)	UN1203

UN proper shipping name

Proper shipping name (TDG)	MOTOR SPIRIT (Gasoline)
Proper shipping name (IMDG)	MOTOR SPIRIT (Gasoline)
Proper shipping name (ICAO)	MOTOR SPIRIT (Gasoline)
Proper shipping name (DOT)	MOTOR SPIRIT (Gasoline)
Transport hazard class(es)	
DOT hazard class	3
DOT hazard label	3
TDG class	3
TDG label(s)	3
IMDG Class	3

3

ICAO class/division

Transport labels



DOT transport labels



Packing group

TDG Packing Group	II
IMDG packing group	II
ICAO packing group	II
DOT packing group	II

Environmental hazards

Environmentally Hazardous Substance



Special precautions for user

EmS

F-E, S-E

Transport in bulk according to Not applicable. Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US State Regulations Pennsylvania "Right To Know" List Present.

16. Other information	
Revision comments	New issue in new format Revised classification.
Issued by	HCS Group Technical Team
Revision date	3/25/2022
Revision	2
Supersedes date	3/20/2014
SDS No.	23008
SDS status	Approved.
Hazard statements in full	 H225 Highly flammable liquid and vapor. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H336 May cause drowsiness or dizziness. H361d Suspected of damaging the unborn child. H401 Toxic to aquatic life. H411 Toxic to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.