



Mastercool[®]
"World Class Quality"

A/C Quick Flush

Code: 91050, 91051

1. IDENTIFICATION OF PREPARATION AND SOCIETY

- 1.1 Description trade:** A/C Quick Flush Aerosol
Code: 91050, 91051
- 1.2 Uses planned:** Industry: Refrigeration and conditioning
Type of use: Refrigerant
Application: Professional
- 1.3 Society:** Mastercool Inc.
1 Aspen Drive
Randolph, NJ 07869
www.mastercool.com

2. Hazards Identification

2.1 Substance/Preparation Classification:

This preparation is dangerous under 67/548/EEC and 1999/45/EC directives and subsequent amendments. Therefore, this preparation requires a safety data sheet according to the 91/155/EC regulation and subsequent amendments. Further information on health and/or environmental hazards can be found in sections 11 and 12 of this sheet.

2.2 Danger Identification:



H315 – Causes skin irritation
H335 – May cause respiratory irritation
H410 – Very toxic to aquatic life

3. COMPOSITION AND INFORMATION ON INGREDIENTS

3.1 Description:

Name of the chemical substance: Nevada K 5100, a mixture of hydrocarbons.

15 <= C < 16,5

(R)-P-MENTHA-1,8-DIENE

EC 227-813-5

Index No 601-029-00-7

CAS 5989-27-5



H226 – H315 – H317 – H410
GHS 07 – GHS 09

8 <= C < 9

METHOXY-1-METHYLETHYL ACETATE


EC 203-603-9

Index No 607-195-00-7



H226 – H319
GHS 07

CAS 108-65-6

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74 <= C < 78

**n-DECANO**H304 – H315
GHS 07**CAS 124-18-5****EC 204-686-4****4. FIRST AID MEASURES****4. First aid measures**

EYES: Irrigate copiously with clean, fresh water for at least 15 minutes. Seek medical advice.

SKIN: Wash immediately with plenty of water. Remove contaminated clothing. If irritation persists, seek medical attention. Wash contaminated clothing before using them again.

INHALATION: Remove to open air. If breathing is irregular, seek medical advice.

INGESTION: Obtain immediate medical attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Closed containers exposed to the heat of a fire may lead to pressure rise and explode. For information on environmental and health risks, protection of the respiratory airways, ventilation and individual protective measures, refer to the other sections of this sheet.

Extinguishing measures: CO₂, foam, chemical powder for flammable liquids. Water may not be effective to extinguish the fire, nevertheless it should be used to cool the containers exposed to flames and prevent fires and explosions. For leakage and spillage that have not caught fire, nebulized water may be used to disperse the flammable vapours and protect the people involved in stopping the leakage.

Equipment: wear equipment complete with helmet and face shield and protection of the neck, selfbreathing apparatus at pressure or demand, insulative jacket and trousers, with bands around the arms, legs and waist.

6. ACCIDENTAL RELEASE MEASURES

Do not allow the product to dry in order to avoid risk of combustion. Eliminate all sources of ignition. Cover with inert absorbent material and collect the resulting mass with nonsparking tools.

Use water only to remove the residues in order to avoid spillage of the product in the drainage system. For information regarding environmental and health risks and protective measures, refer to the specific sections of this sheet.

7. HANDLING AND STORAGE

Store in a well ventilated place, keeping the containers closed when not used. Do not smoke while handling. Keep far away from sources of heat, naked flames and sparks and other sources of ignition.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**8.1 Exposure Limits (TLV)**

Name	Type	State	TWA/8h mg/m ³ ppm	STEL/15min mg/m ³ ppm
1-methoxy-2-propylacetate	OEL	EU	275 50	550 100 Skin
	OEL	IRL	50	100 Skin
	WEL	UK	50	100 Skin

8.2 Exposure controls

In order to minimize exposure as far as possible, it is strongly recommended to use adequate individual protective measures, such as: masks suitable for the product, goggles (EN 374), gloves and overall. Do not eat, drink or smoke while handling it. Accurately wash the hands with soap and water before meals and at the end of the work shift.

9. TYPICAL PHYSICAL PROPERTIES:



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- State	: liquid
- Appearance and colour	: colorless limp
- Odour	: Characteristic
- Boiling Point	: N.A.
- Flash point	: N.A.
- Lower explosive limit	: 0,6 % (v/v)
- Upper explosive limit	: 7 % (v/v)
- Vapour pressure	: N.A.
- Distillation range	: 143-173 °C
- Specific gravity	: 0,755-0,765 g/cc a 20°C
- VOC (Directive 1999/13/EC)	: 100,00 %
- VOC (volatile carbon)	: 82,36 %

10. STABILITY AND REACTIVITY

The product is stable in normal conditions of use and storage. When heated or in the event of a fire, carbonoxides may be released and vapours which are dangerous to health.

The vapours may also form explosive mixtures with the air.

1-methoxy-2-propylacetate: it is stable but in presence of air, it can gradually form peroxides which explode due to the rise in temperature. It can react violently with oxidizing agents and strong acids and alkaline metals.

Avoid copper, aluminium and their alloys when storing.

Store under inert atmosphere, repaired from humidity because it easily hydrolyses.

11. TOXICOLOGICAL INFORMATION

Upon contact with skin, this product causes sensitization (dermatitis).

Dermatitis derives from skin irritation on the areas which repeatedly come into contact with the sensitizing agent.

Cutaneous lesions may include: erythemas, edemas, papules, vesicles, pustules, scurves, ulcerations and exudative phenomena, whose intensity varies according to illness seriousness and affected areas.

Erythemas, edemas and exudative phenomena prevail during the acute phase.

Scurfy skin, dryness, ulcerations and skin thickening prevail during the chronic phase.

The introduction of even small quantities of this liquid into the respiratory system in case of ingestion or vomit may cause bronchopneumonia and pulmonary edema.

This product may have a degreasing action on the skin, producing dryness and chapped skin after repeated exposure.

1-methoxy-2-propanol and corresponding acetate: the main route of entry is the skin, whereas the respiratory route is less important owing to the low vapour tension of the product.

Concentrations above 100 ppm cause irritation of the eyes, nose and oropharynx.

The recommended limit of exposure is 100 ppm for 8 hours.

At 1000 ppm disturbance in the equilibrium and severe irritation of the eyes is observed. (For further details refer to INRS, Fiche toxicologique, nr. 221).

Clinical and biological examinations carried out on exposed volunteers revealed no anomalies.

Acetate produces greater skin and ocular irritation on direct contact.

No chronic effects have been reported in man.

In vitro genotoxicity tests on animals resulted to be negative.

No significant effects were observed in studies on animal reproduction.

The following experimental data confirm that the substance is not even harmful: oral LD50 in the rat = 7900 mg/kg, inhalation CL50 in the rat 4 hours = 55.2 mg/l (Fiche toxicologique nr. 221).

2-METHOXY-1-METHYLETHYL ACETATE: oral LD50 (mg/kg) > 5000 (RAT) ; dermal LD50 (mg/kg) > 5000 (RAT)

12. ECOLOGICAL INFORMATION:

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it may even have negative effects on the aquatic environment.

13. DISPOSAL INFORMATION Consider the possibility of burning the product in a suitable incenerator. Acid or basic products must always be neutralized before undergoing any treatment, including biological treatment whenever feasible. If the waste is solid, it can be disposed of in a landfill.



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14. TRANSPORT INFORMATION:

These goods must be transported by vehicles authorized to the carriage of dangerous goods according to the provisions set out in the current edition of the Code of International Carriage of Dangerous Goods by Road (ADR) and in all the applicable national regulations.

These goods must be packed in their original packagings or in packagings made of materials resistant to their content and not reacting dangerously with it. People loading and unloading dangerous goods must be trained on all the risks deriving from these substances and on all actions that must be taken in case of emergency situations.

Road and rail transport:

ADR/RID



UN 1950 Aerosol

Carriage by sea (shipping):

IMO



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15. REGULATORY INFORMATION

15.1 Updated Reg. CE 1272/2008, CE 1907/2006 and UE 453/2010:



H400 – Very toxic to aquatic life.
 H413 – May cause long-term adverse effects in the aquatic environment.
 H221 – Flammable.
 H305 – May cause long-term adverse effects in the aquatic environment.
 EUH 066 – Harmful: may cause lung damage if swallowed Repeated exposure may cause skin dryness or cracking.
 H320 – Causes eye irritation.
 H315 – Causes skin irritation.
 H316 – Causes mild skin irritation.

16. OTHER INFORMATION

GENERAL BIBLIOGRAPHY

1. Directive 1999/45/EC and following amendments;
2. Directive 67/548/EEC and following amendments and adjustments (technical adjustment XXIX);
3. Regulation (EC) 1907/2006 (REACH) of the European Parliament;
4. The Merck Index. - 10th Edition;

Version 1: Version 2:

03/2011 11/2015

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