

SAFETY DATA SHEET: MENNO Florades.

(According to Regulation (EC) No 1907/2006)

1 IDENTIFICATION OF THE SUBSTANCE OR PREPARATION AND COMPANY:**PRODUCT:** MENNO FLORADES (product code 5079_Florade)**Use of the substance/preparation:** Plant Protection Product – disinfectant – MAPP 13985.

Company/undertaking identification

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Further information: All data concerning physico-chem. properties are not fit to establish specifications.**2 HAZARDS IDENTIFICATION:**

Indications of danger: Irritant

R-phrases: Flammable. Risk of serious damage to eyes. Vapours may cause drowsiness and dizziness.

3 COMPOSITION /INFORMATION ON INGREDIENTS**Chemical characterization** (Mixture) Solution of a benzoic acid in an organic solvent.

Hazardous components:

EC No.	Cas-No	Chemical name	Quantity	Classification
200-746-9	71-23-8	propan-1-ol	20 - 25 %	F, Xi R11-41-67
200-661-7	67-63-0	propan-2-ol	10 - 15 %	F, Xi R11-36-67
200-618-2	65-85-0	benzoic acid	5 - 10 %	Xi R41

Full text of each relevant R phrase can be found in heading 16.

4 FIRST AID MEASURES:**General information:** Take off all contaminated clothing immediately.**After Inhalation:** Move to fresh air. Keep warm and in a quiet place.**After Skin contact:** Wash off with soap and water.**After contact with eyes:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a

physician if irritation develops or persists.

After Ingestion: If conscious, drink plenty of water. In case of ingestion, the stomach should be emptied by gastric lavage under qualified medical supervision. If a person vomits when lying on his back, place him in the recovery position.**Advice to doctor:** Aspiration may cause pulmonary oedema and pneumonitis.**5 FIRE FIGHTING MEASURES:****Suitable extinguishing media:** Dry chemical, Carbon dioxide (CO₂), Water spray, Alcohol-resistant foam.**Extinguishing media which must not be used for safety reasons:** High volume water jet**Special exposure hazards arising from substance or preparation itself, combustion products, resulting gases:** Burning produces irritant fumes.**Special protective equipment for fire-fighters:**

In the event of fire, wear self-contained breathing apparatus.

6 ACCIDENTAL RELEASE MEASURES:**Personal precautions:** Use personal protective equipment.**Environmental precautions:** Do not flush into surface water or sanitary sewer system.**Methods for cleaning up/taking up:** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). After cleaning, flush away traces with water.**Additional information:** Remove all sources of ignition.**7 HANDLING AND STORAGE:****Handling:****Advice on safe handling:** Keep container tightly closed. Handle and open container with care. Do not spray on a naked flame or any other incandescent material.**Advice on protection against fire and explosion:**

Vapours are heavier than air and may spread along floors. Keep product and empty container away from heat and sources of ignition. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours).

Storage:**Requirements for storage rooms and vessels:** Jointless smooth floor.**Advice on storage compatibility:** Keep away from food, drink and animal feedingstuffs.**Further information on storage conditions:** Keep at temperatures between 0 and 30 °C.**Storage class (VCI):** 3 A.**8. EXPOSURE CONTROLS / PERSONAL PROTECTION:****Exposure limit Values**

Exposure limits (EH40)

CAS-No.	Chemical name	ml/m ³	mg/m ³	F/ml	Category	Origin
71-23-8	Propan-1-ol	200	500		TWA (8 h)	WEL
		250	625		STEL (15 min)	WEL
67-63-0	Propan-2-ol	400	999		TWA (8 h)	WEL
		500	1250		STEL (15 min)	WEL

Exposure controls**Protective and hygiene measures:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke. Avoid contact with the skin and the eyes.**Respiratory protection:** In case of mist, spray or aerosol

exposure wear suitable personal respiratory protection and protective suit

Hand protection: Suitable material: Nitrile rubber Short term only: Chloroprene. Unsuitable material: PVC disposable gloves, Latex gloves.**Eye protection:** Safety glasses with side-shields.**Skin protection:** No special protective equipment required.**9. PHYSICAL AND CHEMICAL PROPERTIES****General information**

Physical state: liquid

Colour: colourless, light yellow

Odour: alcoholic

Important health, safety and environmental information:

pH-Value (at 20 °C): 1% : ca. 2,8 (CIPAC MT75)

Changes in the physical state

Boiling point: 82 - 100 °C (EC A.2)

Flash point: 28,5 °C (EC A.9/DIN 51755)

Lower explosion limits: 3 vol. %

Upper explosion limits: 15 vol. %


Vapour pressure (at 20 °C): 21 hPa

Density (at 20 °C): ca. 1 g/cm³

Water solubility: completely miscible

Other information

Ignition temperature: > 435 °C (EC A15)

10. STABILITY AND REACTIVITY:		
Conditions to avoid: (Stable under normal conditions). Direct sources of heat., Strong sunlight for prolonged periods Materials to avoid: Incompatible with strong bases and		oxidizing agents. Hazardous decomposition products: No decomposition if stored and applied as directed.
11. TOXICOLOGICAL INFORMATION:		
Acute toxicity: LD50/oral/rat = >2000 mg/kg (EC B.1/OECD401) LD50/dermal/rat = >2000 mg/kg (EC B.3/OECD 402) Corrosive and irritant effects: Acute dermal irritation/corrosion : No skin irritation (EC B.4/OECD 404) Acute eye irritation/corrosion : irritating (EC B.5/OECD 405)		Sensitising effects: Sensitisation : Did not cause sensitization on laboratory animals. (EC B.6/OECD 406, Magnusson-Kligman). Severe effects after repeated or prolonged exposure: No persistent or cumulative effects were observed. Carcinogenic/mutagenic/toxic effects for reproduction: Benzoic acid is not given in any official list as a carcinogen or mutagen.
12. ECOLOGICAL INFORMATION:		
Ecotoxicity: Acute Fish toxicity (LC50/96h/ <i>Brachydanio rerio</i>): >100mg/L (OECD 203 / EC C.1) Toxicity to Daphnia (EC50/48h/ <i>Daphnia magna</i>): 255mg/L (OECD 202 (2004) / EC C.2) Algal inhibition test (ErC 50 + EbC50/72 h (<i>Scenedesmus subspicatus</i>): >1000 mg/L (OECD 201 (2006) / EC C.3)		Persistence and degradability Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants. Readily biodegradable, according to appropriate OECD test. Bioaccumulative potential: Does not bioaccumulate. Further information: Product does not contain any organic halogens.
13. DISPOSAL CONSIDERATIONS:		
Waste disposal number of waste from residues/unused products (020108): WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING; wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing; agrochemical waste containing dangerous substances - Classified as hazardous waste. Waste disposal number of used product (020108) WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING; wastes from		agriculture, horticulture, aquaculture, forestry, hunting and fishing; agrochemical waste containing dangerous substances - Classified as hazardous waste. Waste disposal number of contaminated packaging (150102): WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging Contaminated packaging: Rinse empty containers with water and use the rinse-water to prepare the working solution. Materials can be delivered to a plastics recycling facilities after cleaning.
14. TRANSPORT INFORMATION		
Land transport (ADR/RID) UN number: 1987 ADR/RID class: 3 Classification code: F1 Warning plate Hazard-no.: 30 Hazard label: 3 ADR/RID packing group: III Limited quantity: LQ7 Tunnel restriction code: (D/E) Description of the goods: 1987 - Alcohols, n.o.s., (n-Propanol + Propan-2-ol , Solution). Other applicable information (land transport): Limited quantity : 5 Litre.	Marine transport UN number: 1987 IMDG code: 3 Marine pollutant: no Hazard label: 3 IMDG packing group: III EmS: F-E, S-D Description of the goods 1987 - Alcohols, n.o.s. , (n-Propanol + Propan-2-ol , Solution). Other applicable information (marine transport): Limited quantity : 5 Litre	Air transport UN/ID number: 1987 ICAO/IATA-DGR: 3 Hazard label: 3 ICAO packing group: III IATA-packing instructions - Passenger: 309 IATA-packing instructions - Cargo: 310 Description of the goods: 1987 - Alcohols, n.o.s. (n-Propanol + Propan-2-ol , Solution).
15. REGULATORY INFORMATION:		
Labelling Danger symbols: Xi – Irritant, R phrases: 10 Flammable. 41 Risk of serious damage to eyes. 67 Vapours may cause drowsiness and dizziness. S phrases: 2 Keep out of the reach of children. 13 Keep away from food, drink and animal feedingstuffs. 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.		46 If swallowed, seek medical advice immediately and show this container or label. 20/21 When using do not eat, drink or smoke. 37/39 Wear suitable gloves and eye/face protection. EU regulatory information: 1999/13/EC (VOC): VOC: 38,9 % National regulatory information: Water contaminating class (D): 1 - slightly water contaminating. Additional information To avoid risks to man and the environment, comply with the instructions for use.
16. FURTHER INFORMATION		
Full text of R-phrases referred to under sections 2 and 3: 10 Flammable. 11 Highly flammable. 36 Irritating to eyes. 41 Risk of serious damage to eyes. 67 Vapours may cause drowsiness and dizziness.		
Further Information: The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text. (The data for the hazardous ingredients were taken respectively from the last version of the pre-suppliers safety data sheet.) Menno Florades® is a registered trade mark of MENNO CHEMIE-VERTRIEB GMBH Germany. Patented EP 1124415		