



**Material Safety Data Sheet according to Regulation (EC) No. 1907/2006
(revised by Regulation (EC) No. 453/2010)**

JAVANA Follow-Up-Medium

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1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Identification of the substance/preparation

Trade name JAVANA Follow-Up-Medium
Article No. 950021
Package size 20 ml
Substance name -
INDEX No. -
EG No. -
CAS No. -
REACH Registration No. -

1.2 Use of the substance/preparation

Follow-Up-Medium.

1.3 Manufacturer/Supplier

C. KREUL GmbH & Co. KG
Carl-Kreul-Strasse 2
D-91352 Hallerndorf
Phone no. +49 (0) 9545 925-0
Fax no. +49 (0) 9545 925-511
Mail info@c-kreul.de

Information provided by

Mrs. Treiber, b.treiber@c-kreul.de

1.4 Emergency information

Phone no. +49 (0) 9545 925-0
Fax no. +49 (0) 9545 925-511

(Monday – Thursday 8.00 – 17.00; Friday 8.00 – 15.00)

2. HAZARD IDENTIFICATION

2.1 Classification of the substance/preparation

Classification according to Regulation (EC) 1272/2008

STOT RE (kidney) 2 (oral); Aquatic Chronic 3 H412; EUH208

Classification according to Regulation (EC) 67/548 or Regulation (EC) 1999/45

R52/53



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2.2 Labelling according to Regulation (EC) 1272/2008 or Regulation (EC) 1999/45

Labelling according to Regulation (EC) 1272/2008

Hazard pictogram and signal word of the product



Warning

Hazard-determining components of labelling

Ditethylene glycol.

Hazard statements

H373 May cause damage to organs (kidney) through prolonged or repeated exposure (oral).

H412 Harmful to aquatic life with long lasting effects.

European hazard statements

EUH208 Contains 2-octyl-2H-isothiazol-3-one, 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P260 Do not breathe vapours/spray.

P273 Avoid release to the environment.

P314 Get medical advice/attention if you feel unwell.

P501 Dispose of contents/container to hazardous or special waste collection point.

Labelling according to Regulation (EC) 67/548 or Regulation (EC) 1999/45

Danger symbol and danger designation of the product

-

Hazard-determining components of labelling

-

Risk-phrases

52/53 Harmful to aquatic organisms may cause long-term adverse effects in the aquatic environment.

Safety-phrases

29/56 Do not empty into the drains, dispose of this material and its container at hazardous or special waste collection point.

2.3 Other Hazards

None.

Results of PBT and vPvB assessment: Not applicable.



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3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization

Aqueous preparation an quaternary ammonium compound.

3.1 Substance related information

Main component

The product is a preparation.

-

INDEX No. -

EG No. -

CAS No. -

REACH Registration No.: -

Classification according to Regulation (EC) 1272/2008: -

Classification according to Regulation (EC) 67/548: -

(Danger designation: -)

Hazard impurities

-

INDEX No. -

EG No. -

CAS No. -

REACH Registration No.: -

Classification according to Regulation (EC) 1272/2008: -

Classification according to Regulation (EC) 67/548: -

(Danger designation: -)

3.2 Preparation/mixture related information



10 – 25 % Diethylene glycol

INDEX No. 603-140-00-6

EG No. 203-872-2

CAS No. 111-46-6

REACH Registration No.: 01-2119457857-21-XXXX

Classification according to Regulation (EC) 1272/2008:  Asp. Tox.4 H302;  STOT RE (Niere) 2 H373

Classification according to Regulation (EC) 67/548:  Xn R22

(Danger designation: Harmful)

10 – 15 % Quaternary ammonium compound


INDEX No. -

EG No. -

CAS No. -

REACH Registration No.: -

Classification according to Regulation (EC) 1272/2008:  Aquatic Chronic 2 H411

Classification according to Regulation (EC) 67/548:  N R51/53

(Danger designation: Dangerous for the environment)

Full text of R-, H- and EUH-phrases: see section 16.



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4. FIRST AID MEASURES

4.1 General information

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

After inhalation

Remove to fresh air, keep patient warm and at rest. In case of unwellness, seek medical advice (show directions for use or safety data sheet if possible).

After skin contact

In case of skin reactions, consult a physician. After contact with skin, wash with plenty of water and soap. Do NOT use solvents or thinners.

After eye contact

Remove contact lens. Irrigate copiously with clean, fresh water for at least 10 - 15 minutes, holding the eyelids apart and seek medical advice.

After ingestion

If swallowed immediately drink: water. Do NOT induce vomiting. In case of unwellness, seek medical advice (show directions for use or safety data sheet if possible). During spontaneous vomiting hold the head of the casualty low with the body in a prone position in order to avoid aspiration.

4.2 The most important acute and delayed appearing symptoms and effects

No known symptoms to date. See part 11.

4.3 References to medical emergency relief or special treatment

Further instructions see section 4.1

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Foam, water spray and carbon dioxide.
Extinguishing media which must not be used for safety reasons: Full water jet.

5.2 Special risk posed by the substance or by the actual preparation, its combustion products or gases discharged

When product exposed to high temperatures it may produce hazardous decomposition products such as carbon monoxide and carbon dioxide, smoke and other hazards components.

5.3 Special protective equipment

In case of fire: Wear self-contained breathing apparatus. Use water spray jet to protect personnel and to cool endangered containers. Do not allow the quenching water into the sewage system. Dispose fire debris and contaminated fire fighting water in accordance with official regulations.

5.4 Additional information

Product itself does not burn. Compare section 3, 7, 8 and 10.



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6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions

Special danger of slipping by leaking/spilling product.

6.2 Environmental precautions

Take up with a liquid absorbing material and proceed according to the waste disposal regulations. Do not empty into drains or watercourses. Further instructions see section 6.3.

6.3 Methods for cleaning up/collecting

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Clean preferably with a detergent; avoid use of solvents. Further instructions see part 10.

6.4 Additional information

Further instructions see section 7, 8 and 10.

7. HANDLING AND STORAGE

7.1 Information for safe handling

Avoid eye and skin contact. Avoid inhalation of vapour and spray mist. Smoking, eating and drinking should be prohibited in application area. See protective measures under point 8.

Precautions against fire and explosion

No special measures necessary. Product itself does not burn. Further instructions see 7.1.

7.2 Conditions for safe storage, including incompatibilities

Information about storage conditions

Store between 5 and 30 °C in a dry, well-ventilated place away from sources of heat and direct sunlight. Protect against: frost.

Hints on joint storage

Only substances of the same storage class should be stored together. Keep away from oxidizing agents, from strongly alkaline and strongly acid materials. The substance should not be stored with substances with which hazardous chemical reactions are possible.

Requirement for storage rooms and vessels

Store between 5 and 30 °C in a dry, well-ventilated place away from sources of heat and direct sunlight. Keep container tightly closed. Observe label precautions.

Additional information

Storage class (VCI): 12 Non-combustible liquids

7.3 Specific uses

See section 1.2.



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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Components with critical values that require monitoring at the workplace (exposure limits)

Diethylene glycol; CAS No. 111-46-6

Specification: AGW

Value: 10 ml/m³ (ppm); 44 mg/m³

Peak limitation: 4 (II)

Toxic to reproduction: Y - a risk of reproductive effects needs not to be feared if the occupational exposure limit value (AGW) and the biological limit value (BGW) is kept

Remark: DFG

DNEL/DMEL-Values

No data available.

PNEC-Values

No data available.

8.2 Occupational exposure controls

Technical measures and the application of suitable working methods have precedence before the application of personal protective equipment. Suitable judgement methods of the examination of the effectiveness of the grievied preventive measures enclose measuring-technical and non-technical inquiry methods like they in the technical rules for danger materials (TRGS) 402.

Personal protective equipment

Do not eat or drink during work. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Avoid contact with eyes. Remove soiled or soaked clothing immediately.

Respiratory protection

Provide good ventilation when handling large quantities.

Skin protection

Avoid contact with skin. Use protective gloves (EN 374). Solvent-resistant protective gloves must be worn. The glove material must be sufficiently impermeable and resistant to the substance. Check the tightness before wear. Gloves should be well cleaned before being removed, then stored in a well ventilated location. Textile or leather gloves are completely unsuitable. Pay attention to skin care.

Nitrile rubber/Nitrile latex - NBR (0,4 mm)

Permeation time \geq 30 min

Splash guard

Nitrile rubber/Nitrile latex - NBR (0,4 mm)

Permeation time \geq 30 min

The times listed are suggested by measurements taken at 22 °C and constant contact. Temperatures raised by warmed substances, body heat, etc. and a weakening of the effective layer thickness caused by expansion can lead to a significantly shorter breakthrough time. In case of doubt contact the gloves' manufacturer. A 1.5-times increase / decrease in the layer thickness doubles / halves the breakthrough time. This data only applies to the pure substance. Transferred to mixtures of substances, these figures should only be taken as an aid to orientation.



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Eye protection

Avoid contact with eyes. Use safety glasses according to EN 166:2001.

Body protection

No special measures necessary.

Limitation and supervision of the environmental exposition

See section 6 and 7.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 General information

Form: liquid
Colour: refer to label
Odour: characteristic

9.2 Relevant safety data

Flashpoint: not determined
Viscosity: not determined ISO 2431
Density: (20 °C) 0,95 g/cm³ DIN 53217
Explosive limits:
Lower / Upper: not applicable
Ignition temperature: not applicable
Vapour pressure: not determined
pH-value: 6 – 9
Solubility in water: miscible

9.3 Additional information

No other physical-chemical data available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. See section 7.

10.2 Chemical stability

If handled properly then product has chemical stability.

10.3 Possible dangerous reactions

None, if handled according to order. Further instructions see section 10.1 and 10.2.

10.4 Conditions to avoid

Keep cool. Protect from sunlight.

10.5 Incompatible materials

See section 10.1.



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10.6 Hazardous decomposition products

When product exposed to high temperatures, it may produce hazardous decomposition products such as carbon monoxide and carbon dioxide, smoke and other hazardous components.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Diethylene glycol; CAS No. 111-46-6

LD_{50, oral, rat} = 12600 mg/kg (Reference: Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 25, 1974.)

LD_{50, dermal, rabbit} = 11900 mg/kg (Reference: Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 25, 1974.)

Remark: Substance/product listed in Regulation (EC) 1272/2008.

Primary irritant effect

**after inhalation
on the skin**

There are no data available on the preparation itself.
Frequent contact can lead to skin irritation, especially if product is allowed to dry out.

on the eyes

The liquid splashed in the eyes may cause irritation and reversible damage.

after ingestion

May cause damage to organs (kidney) through prolonged or repeated exposure (oral).

Sensitization

No sensitizing effects know.

Chronic

There are no data available on the preparation itself.

11.2 Additional toxicological information

The product is classified according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Harmful to aquatic life with long lasting effects.

Diethylene glycol; CAS No. 111-46-6

LC_{50, fish, 96h} = 75200 mg/l (Reference: Geiger, D.L., L.T. Brooke, and D.J. Call 1990. Acute Toxicities of Organic Chemicals to Fathead Minnows (*Pimephales promelas*), Volume 5. Ctr.for Lake Superior Environ.Stud., Univ.of Wisconsin-Superior, Superior, WI :332 p.)

Remark: -

12.2 Persistence/degradability

There are no data available.



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12.3 Bioaccumulative potential

There are no data available.

12.4 Mobility

There are no data available.

12.5 Results of PBT and vPvP assessment

There are no data available.

12.6 Other adverse effects

There are no data available.

12.7 Further ecological information

Do not discharge into the drains/surface waters/groundwater.

Water hazard class: WGK 2 hazardous to water

(according VwVwS)

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Send to a hazardous waste incinerator facility under observation of official regulations. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Recommendation

Disposal must be made according to official regulations.

13.2 European waste code number in accordance with AAV

EWC No.: 08 01 12 waste paint and varnish other than those mentioned in 08 01 11

13.3 Packaging

Contaminated packaging

Contaminated packaging should be emptied as far as possible and after appropriate cleansing, may be taken for reuse. Packaging that cannot be cleaned should be disposed in the same manner as the medium.

Non-contaminated packages

EWC No.: 15 01 02 plastic packaging

EWC No.: 15 01 07 glass packaging

14. TRANSPORT INFORMATION

14.1 Land transport ADR/RID and GVS/GGVE

Not classified as hazardous.

Class: -

Kemler-Code: -

UN No.: -

Packaging group: -



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Label: -
Special marking: -
Proper shipping name: -
Classification-Code: -
Limit: -
Tunnel restriction code: -

14.2 Maritime transport IMDG/GGVSea

Not classified as hazardous.

Class: -
UN No.: -
Label: -
Packaging group: -
EmS-No.: -
Marine pollutant: -
Proper shipping name: -

14.3 Air transport ICAO-TI and IATA-DGR

Not classified as hazardous.

ICAO/IATA Class: -
UN no.: -
Label: -
Packaging group: -
Proper shipping name: -

14.4 Remarks

Product contains environmentally hazardous substances: -.

15. REGULATORY INFORMATION

#

15.1 European Regulation

Chemical Safety Assessment: For this substance a chemical safety assessment is not required.

15.2 National Regulations

Statutory order on hazardous incidents (StörfallV): -

Regulation on inflammable liquids: VbF-Class: -

Emission control act ("TA-Luft"): -

Water hazard class: WGK 2 hazardous to water

(according VwVwS)

15.3 Additional information

The product is classified according to the EEC directives and the Ordinance on Hazardous Materials (GefStoffV).

If bottle \leq 125 ml then the following H- and P-phrases are not necessary: -

Please check local regulations.

Volatile organic compounds (Swiss): < 3 %



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16. OTHER INFORMATION

16.1 Changes compared with the last version

The last version was all changed and revised completely. Alterations to the previous edition are marked in the right-hand margin.

16.2 Literature reference and data source

Regulation (EC) 1999/45, last changed by Regulation (EC) 1907/2006
Regulation (EC) 67/548, last changed by Regulation (EC) 2009/2
REACH Regulation (EC) 1907/2006, last changed by Regulation (EC) 453/2010
Regulation (EC) 1272/2008, last changed by Regulation (EC) 790/2009

Internet

<http://www.baua.de>
<http://www.arbeitssicherheit.de>
<http://www.gischem.de>

16.3 Full text of H- and R-phrases appearing in section 2 and 3:

According to Regulation (EC) 1272/2008

Acute Tox.4* H302	Harmful if swallowed.
STOT RE 2 H373	May cause damage to organs (kidney) through prolonged or repeated exposure (oral).
Aquatic Chronic 2 H411	Toxic to aquatic life with long lasting effects.

EUH – statements

-

Classification according to Regulation (EC) 67/548 or Regulation (EC) 1999/45:

22 Harmful if swallow.
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Methods according to article 9 of the order (EC) No. 1272/2008 for the assessment of the information for the purpose of the classification were used:

Classification according to Regulation (EC) 1272/2008, Annex VII (conversion table)

16.4 Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

BImSchV: Order for the realisation of the Federal Immission Protection Law

CAS: Chemical Abstracts Service

DIN: Norm of the German institute of standardization

EC: Effective concentration

EC50: Effective concentration, 50 percent

EG: European Community

EINECS: European Inventory of Existing Commercial Chemical Substances



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EN:	European Standard
GefStoffV:	Ordinance on Hazardous Substances, Germany
GHS:	G lobally H armonized S ystem of Classification and Labelling of Chemicals
IATA:	I nternational A ir T ransport A ssociation
IMDG:	I nternational M aritime C ode for D angerous G oods
LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent
Log K_{ow}:	n-octanol-water partition coefficient
OECD:	O rganisation for E conomic C o-operation and D evelopment
PBT:	P ersistent, b ioaccumulable, t oxically
RID:	Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
TRGS:	T echnical rules for danger materials
UN:	U nited N ations (Vereinte Nationen)
VOC:	V olatile O rganic C ompounds
vPvB:	very much persistent and very bioaccumulable
VwVwS:	Administrative regulation of hazardous to waters materials
WGK:	W ater hazardous class

16.5 Department issuing safety data sheet

Laboratory, Mrs. Dipl.-Ing. Treiber, b.treiber@c-kreul.de.

16.6 Additional information

The data is based on our present knowledge. The data correspond to the national and EEC legislation. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

It is not permitted to use the product for any other application mentioned in chapter 1 except with a written permission. The user is responsible for the compliance with all valid legal regulation.

This safety data sheet is only valid for JAVANA Follow-Up-Medium. It's not valid for other products placed in the according sales displays or sets.