

Material Safety Data Sheet

according to Regulation (EC) 1907/2006 - 453/2010



Product name : SUPER-FLUSH

Code: 13005030;13005042;13005048

Revision : 07.02.2014
Print date : 10/02/2014

Version : 1.0.2
Previous Version : 1.0.1

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

SUPER-FLUSH (13005030;13005042;13005048)

1.2 Relevant identified uses of the substance or mixture and uses advised against

Ingredient for industrial processes. Solvent.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier : WIGAM Spa

Street/P.O.Box : Loc.Spedale 10/b Castel San Nicolò

Country code/Postal code/Town/City : 52015 (AR) Italy

Telephone : +39 0575 5011

Telefax : +39 0575 501200

Contact : info@wigam.it

1.4 Emergency telephone number

Centro Antiveleni di Milano 02 66101029 (CAV Ospedale Niguarda Ca' Granda -Milano) (H24)
Centro Antiveleni di Pavia 0382 24444 (CAV IRCCS Fondazione Maugeri - Pavia)
Centro Antiveleni di Bergamo 800 883300 (CAV Ospedali Riuniti - Bergamo)
Centro Antiveleni di Firenze 055 7947819 (CAV Ospedale Careggi - Firenze) Centro
Antiveleni di Roma 06 3054343 (CAV Policlinico Gemelli - Roma) Centro Antiveleni di
Roma 06 49978000 (CAV Policlinico Umberto I - Roma) Centro Antiveleni di Napoli 081
7472870 (CAV Ospedale Cardarelli - Napoli)

2. Hazards identification

2.1 Classification of the substance or mixture Directive

67/548/EEC or 1999/45/EC

May cause sensitization by skin contact. · IrritantToxic to aquatic organisms, may cause long-term advng to eyes, respiratory system and skin. · Vapours erse effects in the aquatic environment. · Limited may cause drowsiness and dizziness. evidence of a carcinogenic effect. ·

N ; R 51/53 · Carc. Cat.3 ; R 40 · R 43 · Xi ; R 36/37/38 · R 67

Regulation (EC) No 1272/2008 (CLP)

Suspected of causing cancer. · May cause damage to organs through prolonged or repeated exposure. · Causes skin irritation. · Causes serious eye irritation. · May cause respiratory irritation. · May cause drowsiness or dizziness. · Toxic to aquatic life with long lasting effects.

Aquatic Chronic 2 ; H411 · Carc. 2 ; H351 · Eye Irrit. 2 ; H319 · Skin Irrit. 2 ; H315 · STOT SE 3 ; H335 · STOT SE 3 ; H336 ·

STOT RE 2 ; H373

2.2 Label elements

Regulation (EC) No 1272/2008 (CLP) Hazard pictograms



Health hazard (GHS08) · Environment (GHS09) · Exclamation mark (GHS07)

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Warning
Signal word

Hazard statements

H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash the hands thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P308/313 IF exposed or concerned: Get medical advice/attention.
P403/233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container to to according the local normative. 2.3 Other hazards None.

3. Composition/information on ingredients

3.2 Mixtures

Hazardous components

For the wording of the listed risk phrases refer to section 16.

4. First aid measures

4.1 Description of first aid measures

General In all cases of doubt, or when symptoms persist, seek medical attention.

After inhalation Remove from the danger zone, move to a ventilated place; if symptoms of malaise appear seek medical assistance.

After skin contact Flush away with water and rinse. Change clothes if necessary. If irritation persists or tissue damage occurs, consult a physician.

After eye contact Wash with running water for several minutes holding the eyelids open. If symptoms persist, consult a physician.

After ingestion

Do not induce vomiting if not authorized by a physician, show the MSDS. Never give anything by mouth to an unconscious person. Call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation:

May cause respiratory irritation, and drowsiness or dizziness.
Can cause cardiac arrhythmia.

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Inhalation of high vapor concentrations may cause symptoms such as headaches, dizziness, fatigue, nausea and vomiting. Repeated or prolonged exposure: Inhalation may cause central nervous system effects. Contact with skin:

Eye Contact: The product may be absorbed through the skin.

Risk of temporary eye injury Symptoms:

Tearing, Redness Ingestion:

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Hematologic system:

Can damage the liver and kidneys.

Risk of loss of consciousness

4.3 Indication of any immediate medical attention and special treatment needed None.

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture

Hydrochloric acid. Chlorine. Phosgene.

5.3 Advice for firefighters

In case of fire do not breathe fumes Appropriate breathing apparatus may be required. Keep away unauthorized people from danger area.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protection gloves, clothes, glasses, boots and respiratory apparatus. Refer to protective measures listed in sections 7 and 8. Keep away from the dangerous area not authorized people.

6.2 Environmental precautions

Do not empty into drains. If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up

In case of solid product, avoid the dust release. In case of liquid product, limit and adsorb the spill with inert adsorbing material (for example sand, vermiculite). Put the resultant material in adequate packaging and send to an authorized plant for the disposal. Collect the spread product, and then wash with water area and materials. Recove the water used and send to an authorized plant for the disposal.

6.4 Reference to other sections

None.

7. Handling and storage

For transportation, storage and handling use only proper materials.

7.1 Precautions for safe handling

Information for safe handling

Use with good manufacturing practice and with correct protection devices Avoid the contact and vapours and/or dust inhalation. See the MSDS paragraph 8.

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Information about protection against explosions and fires Keep away from ignition sources - No smoking.

7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and containers Store in a cool, dry place. Avoid exposure to direct sunlight.

Information about separation of incompatible products Keep away from materials which can lead to reaction. See par. 10.

Further information about storage conditions

Keep containers in a well-ventilated place. Storage class : 12

Storage class (TRGS 510) : 6.1D

7.3 Specific end use(s)

None.

8. Exposure controls/personal protection

8.1 Control parameters

DICHLOROMETHANE ; CAS-No. : 75-09-2

Specification :

Parameter : DNEL (EC) Systemic effects_Short-term_Inhalation_Workers
Value : 706 mg/m³
Version date :

Specification :

Parameter : DNEL (EC) Systemic effects_Long-term_Dermal
Value : 4750 mg/kg
Version date :

Specification :

Parameter : DNEL (EC) Systemic effects_Long-term_Inhalation_Workers
Value : 353 mg/m³
Version date :

Specification :

Parameter : DNEL (EC) Systemic effects_Short-term_Inhalation_Population
Value : 353 mg/m³
Version date :

Specification :

Parameter : DNEL (EC) Systemic effects_Long-term_Dermal_Population
Value : 2395 mg/kg
Version date :

Specification :

Parameter : DNEL (EC) Systemic effects_Long-term_Inhalation_Population
Value : 88,3 mg/m³
Version date :

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Specification :

Parameter : DNEL (EC) Systemic effects_Long-term_
Value : Oral_Population 0,06 mg/kg
Version date :

Specification :

Parameter : PNEC (EC)
Intermittent releases
Value : 0,27 mg/l
Version date :

Specification :

Parameter : PNEC (EC)
Sediment (freshwater)
Value : 4,47 mg/kg
Version date :

Specification :

Parameter : PNEC (EC)
Sediment (marine water)
Value : 1,61 mg/kg
Version date :

Specification :

Parameter : PNEC (EC)
Soil
Value : 0,583 mg/kg
Version date :

Specification :

Parameter : PNEC (EC)
Freshwater 0,54 mg/l
Value :
Version date :

Specification :

Parameter : PNEC (EC)
Marine water 0,194 mg/l
Value :
Version date :

Specification :

Parameter : TLV/TWA (EC)
Value : 50ACGIH ppm
Remarks :
Version date :

Specification :

Parameter : TRGS 900 (D)
Value : 754(II) ppm / 260 mg/m³
Category :

Specification :

Version date : 01/09/2012
Specification : TRGS 903 (D)

Parameter : CO-Hb / Whole blood (B) / End of exposure or end of 5 % shift
Value :

Specification :

Version date : 31/03/2004
Specification : TRGS 903 (D)
Parameter : Dichloromethane / Whole blood (B) / End of exposure 1 mg/l or end of shift
Value :
Version date : 31/03/2004 8.2

Exposure controls

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Personal protective equipment

General protective and hygiene measures Do not eat or drink during work - no smoking.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Mask with specific cartridge (organic vapours) Recommended Filter type: AX.

Hand protection Wear rubber gloves approved under standard EN374.

Eye protection Use tightly fitting safety glasses.

Additional information about engineering measures

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit) , suitable respiratory protection must be worn.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Relevant safety data

	Aspect		liquid
Colour	colourless	Odour	typical

Vapour density ((air = 1))

Data not available

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Boiling temperature/boiling range : (1013 hPa) 38 - 177 °C

Oxidizing properties

9.2

Other

Decomposition temperature :

No data available

Self flammability

No data available

Flash

point :

Not flammable

Flammability (solid, gas)

Data not available

Lower

explosion limit :

No data available

Upper

explosion limit :

No data available

Explosive properties

Data not available

Vapour pressure (20 °C)

0,1 hPa

Density : (20 °C)

1303 g/cm³

Water

solubility : (20 °C)

insoluble

Soluble

in:

organic solvents

Log Pow (20 °C)

not applicable

Odour threshold

Data not available

Evaporation rate

Data not available

Data not available

information None.

10. Stability and reactivity

10.1 Reactivity

No hazardous reactions when stored and handled properly.

10.2 Chemical stability

Stable under recommended storage and handling conditions(See section 7).

10.3 Possibility of hazardous reactions

No hazardous reactions when stored and handled properly.

10.4 Conditions to avoid

Keep away from flames. Avoid exposing the container to direct sunlight. Do not expose this product to high temperatures.

10.5 Incompatible materials

Oxidizing agents. Acids and bases. Aluminium. Zinc. Magnesium. Amines

10.6 Hazardous decomposition products

Hydrochloric acid. Chlorine. Phosgene.

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11. Toxicological information

The product could be harmful for human health.

11.1 Information on toxicological effects

Cancerogenic and mutagenic effects, risks to reproduction

Mutagenicity: Results from in vitro and in vivo tests do not lead to considering the product as genotoxic In vitro

Ames test: Active

Chromosome aberration test in vitro: Active

In vitro gene mutations test on mammalian cells: Inactive

In vivo

Not genotoxic in vivo

DNA repair test on rats hepatocytes: Not genotoxic

Carcinogenicity: Limited evidence of a carcinogenic effect.

In man : Absence of causal relationship between incidence of cancer and exposure to product in epidemiological studies

In animals : Hepatic and pulmonary tumours only observed at high concentrations, Specific effects in mice (mouse, 2 years, Frequency of exposure: Repeated exposure by inhalation)2000 -4000 ppm

Target organs: mammary gland (rat, 2 years, Repeated exposure by inhalation)1000-2000 ppm The results are considered as not easily extrapolated to man tumors were benign.

Reproductive toxicity:

Fertility: Absence of toxic effects on fertility

In animals : Two generations study.: No toxic effects for reproduction, NOAEL: 1500 ppm (Method: OECD Test Guideline 416, rat, By inhalation)

Foetal development:

In animals : Exposure during pregnancy: Absence of toxic effects for foetal development, at doses that produce effects in mothers, NOAEL: 1250 ppm Maternal concentration without effect: < 1250 ppm (Method: OECD Test Guideline 414, rat, mouse, inhalation)

Specific target organ toxicity :

Single exposure : Irritating to respiratory system. Vapours may cause drowsiness and dizziness. Target

Organs : respiratory tract , Central nervous system Inhalation:

Repeated exposure: Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed. In animals :

Target organs: Central nervous system, haemoglobin, Kidney, Liver

12. Ecological information

Use with good manufacturing practice. Avoid the releffects in the aquatic environment. ease in the environment Dangerous for environment: may cause long-term adverse

VOC: Yes

12.1 Toxicity

12.2 Persistence and degradability

Biological degradation / elimination Not readily biodegradable.

12.3 Bioaccumulative potential

Shortly bioaccumulative 12.4

Mobility in soil Evaporates quickly.

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12.5 Results of PBT and vPvB assessment

This product is none, or does not contain a substance called a PBT or vPvB.

12.6 Other adverse effects

There are no data available on the product itself.

13. Disposal considerations

13.1 Waste treatment methods

Recommendation

Pass on to an appropriate incinerating plant or depository or recycling.

14. Transport information

14.1 UN number

2810

14.2 UN proper shipping name

ADR/RID TOXIC LIQUID, ORGANIC, N.O.S. (DICHLOROMETHANE)

IMDG-Code

TOXIC LIQUID, ORGANIC, N.O.S. (DICHLOROMETHANE)

ICAO-TI / IATA-DGR TOXIC LIQUID, ORGANIC, N.O.S. (DICHLOROMETHANE)

14.3 Transport hazard class(es) ADR/RID

Class :

Classification-Code :

Kemlercode :

6.1 T1

Tunnel restriction code :

60 E

Special

provisions :

LQ 5 I - E 1

Label :

6.1 / N

IMDG-Code

Class :

EmS number :

6.1

F-A / S-A

Special provisions :

LQ 5 I - E 1

Label :

6.1 / N

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ICAO-TI / IATA-DGR
Class : 6.1
Special provisions : E 1
Label : 6.1

14.4 Packing group

III

14.5 Environmental hazards

ADR/RID : N
IMDG-Code : P

ICAO-TI / IATA-DGR : N 14.6 Special
precautions for user None.

15. Regulatory information

15.1 mixture Safety, health and environmental regulations/legislation specific for the substance or

National regulatory information

Law on protection of health and safety at work), as Italy: Product subject to legislative decree September 21, 2005 No 238 (Attachment A) Italy: Legislative Decree 2009/161/UE - chemical risk and Decree 81/2008 (Consolidated assessment in accordance with

Title IX

Emission control act ("TA-Luft")

Weight fraction (Number 5.2.5. I) : 95 - 100 %

Water pollution classification

Class : 2 Classification according to VwVwS

International regulatory information

Regulation (CE) 1907/2006: Substance listed in Annex XVII (restricted substance)

DICHLOROMETHANE CAS: 75-09-2 EINECS: 200-838-9 INDEX: 602-004-00-3

Directive 67/548/CEE (Dangerous substances classification, labelling and packaging) and subsequent amendments.

Directive 1999/45/CE (Dangerous preparations classification, labelling and packaging) and subsequent amendments.

Regulation n°. 1907/2006/CE (REACH).

Regulation n°. 1272/2008/CE (CLP).

Regulation n°. 286/2011/CE (amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008)

15.2 Chemical safety assessment

For this mixture a chemical safety assessment has been carried out.

16. Other information

Further information

We have no knowledge or control over the user's working conditions however. The user is responsible for the observance of all required statutory provisions.

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LEGENDA:

ADR: Accord Dangereuses Route
ASTM: ASTM International, originariamente nota come American Society for Testing and Materials (ASTM) EINECS: European Inventory of Existing Commercial Chemical Substances (Registro Europeo delle Sostanze chimiche in Commercio)
EC(0/50/100): Effective Concentration 0/50/100 (Concentrazione Effettiva Massima per 0/50/100% degli Individui)
LC(0/50/100): Lethal Concentration 0/50/100 (Concentrazione Letale per 0/50/100% degli Individui)
IC50: Inhibitor Concentration 50 (Concentrazione Inibente per il 50% degli Individui)
NOEL: No Observed Effect Level (Dose massima senza effetti)
NOEC: No Observed Effect Concentration (Concentrazione massima senza effetti)
LOEC: Lowest Observed Effect Concentration (Concentrazione massima alla quale è possibile evidenziare un effetto) DNEL: Derived No Effect Level (Dose derivata di non effetto)
DMEL: Derived Minimum Effect Level (Dose derivata di minimo effetto)
CLP: Classification, Labelling and Packaging (Classificazione, Etichettatura e Imballaggio)
CSR: Rapporto sulla Sicurezza Chimica (Chemical Safety Report)
LD(0/50/100): Lethal Dose 0/50/100 (Dose Letale per 0/50/100% degli Individui)
IATA: International Air Transport Association (Associazione Internazionale del Trasporto Aereo)
ICAO: International Civil Aviation Organization (Organizzazione Internazionale dell'Aviazione Civile)
Codice IMDG: International Maritime Dangerous Goods code (Codice sul Regolamento del Trasporto Marittimo)
PBT: Persistent, bioaccumulative and toxic (sostanze persistenti bioaccumulabili e tossiche)
RID: Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regolamento concernente il trasporto Internazionale ferroviario delle merci Pericolose) STEL: Short term exposure limit (limite di esposizione a Threshold limit value (soglia di valore limite) breve termine)

TLV: Time Weighted Average (media ponderata nel tempo)
UE: Unione Europea
vPvB: Very persistent very bioaccumulative (sostanze molto persistenti e molto bioaccumulabili)
N.D.: Non disponibile.
N.A.: Non applicabile
VwVwS.: Text of Administrative Regulation on the Classification of Substances hazardous to waters into Water Hazard Classes (Verwaltungsvorschrift wassergefährdende Stoffe – VwVwS)

PNEC: Predicted No Effect Concentration
PNOS: Particulates not Otherwise Specified
BOD: Biochemical Oxygen Demand
COD: Chemical Oxygen Demand
BCF: BioConcentration Factor
TRGS: Technische Regeln für Gefahrstoffe -Technical Rules for Hazardous Substances, defined by The Federal Institute for Occupational Safety and Health, Germany

LCLo: Lethal Concentration Low (La minima concentrazione letale) ThOD: Theoretical Oxygen Demand
Amendment from the previous version.

or mixture Exposure controls/personal protection ToHazards identification Most important symptoms and xicological information Chemical Safety Assessment effects, both acute and delayed Special hazards arising from the substance

In the Exposure Scenarios, if present, a double line indicates updated sections.

R-Phrases of components

10 Flammable.
36/37/38 Irritating to eyes, respiratory system and skin.
38 Irritating to skin.
40 Limited evidence of a carcinogenic effect.
43 May cause sensitization by skin contact.
50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. 65 Harmful:
may cause lung damage if swallowed. 67 Vapours may cause drowsiness and dizziness. GHS Hazard statements of
components

H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction. H319 Causes serious eye
irritation.
H335 May cause respiratory irritation. May cause drowsiness or dizziness.
H336
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.