Safety Data Sheet:

According to EC Regulation 1907/2006/EC - revision 453/2010 (REACH)

Print Date 02/09/2015 **Creation Date** 08/04/2014 **Revision date** 08/04/2014

SECTION 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1. Product identifier

Product Name	SPOT EX
Product Code	EP_X025G X1 (CLP)

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

Recommended use

Cleaning agent.

1.3. Details of the supplier of the safety data sheet

NCH Distribution s.r.o.
Průmyslová 1190
410 02 Lovosice
Czech Republic
Tel.: +420 416 429 111

E-mail address	chemcz@nch.com
Website address	www.flexfill.cz

1.4. Emergency telephone number

01902 510401 (available during Office Hours)

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP/GHS) and its adaptations

Flammable liquid: Category 3
Skin irritation: Category 2
Eye irritation: Category 2
STOT- single exposure: Category 3
H226 - Flammable liquid and vapor.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H336 - May cause drowsiness or dizziness.

Classification according to EU Directive 67/548EEC - 1999/45 EC

Xi - Irritant
R10 - Flammable
R36 - Irritating to eyes
R67 - Vapours may cause drowsiness and dizziness

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP/GHS)

Contains MONOPROPYLENE GLYCOL METHYL ETHER

Hazard pictograms

Signal Word Warning

Hazard Statements
H226 - Flammable liquid and vapor.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H336 - May cause drowsiness or dizziness.
Precautionary Statements
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 - Avoid breathing vapors.
P280 - Wear protective gloves/protective clothing/eye protection.
P312 - Call a POISON CENTER or doctor if you feel unwell.
P337 + P313 - If eye irritation persists: Get medical advice/attention.
P370 + P378 - In case of fire, use water spray/foam/chemical powder to extinguish.
For industrial and institutional use only.
Keep out of reach of children.
(SDS ONLY)
P240 - Ground/Bond container and receiving equipment
P241 - Use explosion-proof electrical/ventilating/lighting/equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P302 + P352 - IF ON SKIN: Wash with plenty of water
P332 + P313 - If skin irritation occurs: Get medical advice/attention
P362 + P364 - Take off contaminated clothing and wash it before reuse
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
P235 - Keep cool
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

2.3. Other hazards
No additional hazards identified
The components in this formulation do not meet the criteria for classification as PBT or vPvB. As defined under the regulation EC 1907/2006.

SECTION 3. COMPOSITION / INFORMATION OF INGREDIENTS

3.2. Mixture

Component	CAS-No	EC No.	EU - REACH Reg Number	Weight %	Classification	EU - GHS/CLP	Notes
MONOPROPYLENE GLYCOL METHYL ETHER	107-98-2	203-539-1	01-2119457435-35	25 - < 50	R10 R67	STOT SE 3 (H336) Flam. Liq. 3 (H226)	
DIMETHYL SUCCINATE (INCI)	106-65-0	203-419-9	.	25 - < 50	Xi; R36		
2-BUTOXYETHANOL	111-76-2	203-905-0	01-2119475108-36	10 - < 20	Xn; R20/21/22 Xi; R36/38	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	
2-Methoxy-1-propanol	1589-47-5	216-455-5	-	< 0.3	R10 Xi; R37/38-41 Repr.Cat.2; R61	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Repr. 1B (H360D) STOT SE 3 (H335) Flam. Liq. 3 (H226)	

For any H statements and R phrases mentioned in this section, see the full text in section 16. The GHS/CLP classification for substances are listed once they have been harmonised according to the REACH Regulation No 1907 / 2006.

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures
General advice
Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists.

Eye Contact
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
Skin Contact
Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.
Ingestion
Rinse mouth with water. Do NOT induce vomiting. If swallowed, seek medical advice and show the container or label.
Inhalation
Remove from the area to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult. If exposed to high concentrations of the vapours / mists, move to fresh air.

4.2. Most important symptoms and effects, both acute and delayed
Sensitization
No information available.
Eye contact
May cause irritation as itching and redness.
Skin contact
May cause irritation as itching or redness.
Inhalation
Inhalation of mists may result in irritation to the respiratory tract.

4.3. Indication of any immediate medical attention and special treatment needed
Notes to physician
Treat symptomatically

SECTION 5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media
Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use:. Water spray. Carbon dioxide (CO2). Foam. Dry powder.
Extinguishing media which must not be used for safety reasons
Water jet.

5.2. Special hazards arising from the substance or mixture
When exposed to high temperatures, the preparation may release dangerous decomposition products such as carbon monoxide and dioxide, smoke and/or nitrogen oxide.

5.3. Advice for firefighters
Firefighters should wear a self-contained breathing apparatus and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures
Avoid contact with skin, eyes, and clothing. Use personal protective equipment. Refer to protective measures listed in sections 7 and 8. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions. Remove all sources of ignition. Ventilate the area.

6.2. Environmental precautions
Avoid release of neat product into surface water and sanitary sewage system.

6.3. Methods and material for containment and cleaning up
Methods for Containment
Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
Methods for Cleaning up
Take precautionary measures against static discharges. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Take up mechanically and collect in suitable container for disposal.

6.4. Reference to other sections
Refer to sections 7, 8 and 13

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling
Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Do not eat, drink or smoke when using this product. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Ensure adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities
Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s)
No information available

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits
If vapours, fumes or mists are generated, their concentration in the workplace area should be kept to the lowest reasonable level.
For substances.

Component	European Union	The United Kingdom	France	Germany	Austria
MONOPROPYLENE GLYCOL METHYL ETHER		STEL: 150 ppm STEL: 560 mg/m^3 TWA: 100 ppm TWA: 375 mg/m^3 Skin	TWA: 50 ppm TWA: 188 mg/m^3 STEL: 100 ppm STEL: 375 mg/m^3 Skin	AGW: 100ppm AGW: 370mg/m^3 Peak: 200ppm Peak: 740mg/m^3 TWA: 100ppm TWA: 370mg/m^3 BGW: 15mg/L	Skin STEL: 50 ppm STEL: 187 mg/m^3 TWA: 50 ppm TWA: 187 mg/m^3 Ceiling: 50 ppm Ceiling: 187 mg/m^3
DIMETHYL SUCCINATE (INCI)				AGW: 1.2ppm AGW: 8mg/m^3	
2-BUTOXYETHANOL		STEL: 50 ppm STEL: 246 mg/m^3 TWA: 25 ppm TWA: 123 mg/m^3 Skin	TWA: 10 ppm TWA: 49 mg/m^3 STEL: 50 ppm STEL: 246 mg/m^3 Skin	AGW: 10ppm AGW: 49mg/m^3 Peak: 20ppm Peak: 98mg/m^3 TWA: 10ppm TWA: 49mg/m^3 Skin BGW: 100mg/L BGW: 200mg/L	Skin STEL: 40 ppm STEL: 200 mg/m^3 TWA: 20 ppm TWA: 98 mg/m^3
2-Methoxy-1-propanol				AGW: 5ppm AGW: 19mg/m^3 Peak: 40ppm Peak: 152mg/m^3 TWA: 5ppm TWA: 19mg/m^3 Skin	Skin STEL: 80 ppm STEL: 300 mg/m^3 TWA: 20 ppm TWA: 75 mg/m^3

Component	Spain	Portugal	Italy	The Netherlands	Switzerland
MONOPROPYLENE GLYCOL METHYL ETHER	Skin STEL: 150 ppm STEL: 568 mg/m^3 TVA: 100 ppm TWA: 375 mg/m^3	TWA: 100 ppm TWA: 375 mg/m^3 STEL: 150 ppm STEL: 568 mg/m^3 Skin	TWA: 100 ppm TWA: 375 mg/m^3 STEL: 150 ppm STEL: 568 mg/m^3 Skin	Skin STEL: 563 mg/m^3 TWA: 375 mg/m^3	STEL: 200 ppm STEL: 720 mg/m^3 TWA: 100 ppm TWA: 360 mg/m^3
2-BUTOXYETHANOL	Skin STEL: 50 ppm STEL: 245 mg/m^3 TWA: 20 ppm TWA: 98 mg/m^3	STEL: 50 ppm STEL: 246 mg/m^3 TWA: 20 ppm TWA: 98 mg/m^3 Skin	TWA: 20 ppm TWA: 98 mg/m^3 STEL: 50 ppm STEL: 246 mg/m^3 Skin	Skin STEL: 246 mg/m^3 TWA: 100 mg/m^3	Skin STEL: 20 ppm STEL: 98 mg/m^3 TWA: 10 ppm TWA: 49 mg/m^3
2-Methoxy-1-propanol	TWA: 5 ppm TWA: 19 mg/m^3				Skin STEL: 40 ppm STEL: 152 mg/m^3 TWA: 5 ppm TWA: 19 mg/m^3

Component	Denmark	Finland	Norway	Sweden	Czech
MONOPROPYLENE GLYCOL METHYL ETHER	TWA: 50 ppm TWA: 185 mg/m^3 Skin	TWA: 100 ppm TWA: 370 mg/m^3 STEL: 150 ppm STEL: 560 mg/m^3 Skin	TWA: 50 ppm TWA: 180 mg/m^3 Skin	50 ppm 190 mg/m^3	PEL: 270mg/m^3 NPK-P: 550mg/m^3
DIMETHYL SUCCINATE (INCI)				5 ppm 30 mg/m^3	
2-BUTOXYETHANOL	TWA: 20 ppm TWA: 98 mg/m^3 Skin	TWA: 20 ppm TWA: 98 mg/m^3 STEL: 50 ppm STEL: 250 mg/m^3 Skin	TWA: 10 ppm TWA: 50 mg/m^3 Skin	10 ppm 50 mg/m^3	PEL: 100mg/m^3 NPK-P: 200mg/m^3
2-Methoxy-1-propanol	TWA: 20 ppm TWA: 75 mg/m^3		TWA: 20 ppm TWA: 75 mg/m^3 Skin		

8.2. Exposure controls

Engineering Measures
Ensure adequate ventilation, especially in confined areas.
Personal Protective Equipment
Use personal protection equipment as per Directive 89/686/EEC

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties
Information below relates to typical values and does not constitute a specification

Appearance	Clear, colorless to yellow	**Specific Gravity**	0.984
Physical State	Liquid	**Solubility**	No information available
Odor	No information available	**Autoignition Temperature**	240 °C
pH	(as 1% solution) 4.0	**Viscosity**	Fluid
Melting Point/Range	No information available	**Explosive properties**	No information available
Boiling Point/Range	No information available	**Oxidizing Properties**	No information available
Flash Point	36 - 44 °C	**VOC Content (%)**	62
Method	Closed cup		
Evaporation Rate	No information available		
Flammability Limits in Air %	No information available		
Vapor Pressure	No information available		
Vapor Density	No information available		

9.2. Other information
No other information available

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity
Not considered as highly reactive. See further information below.
10.2. Chemical stability
Stable under normal conditions
10.3. Possibility of hazardous reactions
The mixture itself will not dangerously react or polymerise to create hazardous conditions in normal use
10.4. Conditions to avoid
Heat, flames, and sparks.
10.5. Incompatible materials
No materials to be specially mentioned
10.6. Hazardous decomposition products
None under normal storage conditions and use.
When exposed to high temperatures, the preparation may release dangerous decomposition products such as carbon monoxide and dioxide, smoke and/or nitrogen oxide.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects
Product Information
The product itself has not been tested

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
MONOPROPYLENE GLYCOL METHYL ETHER	= 5000 mg/kg (Rat)	= 13 g/kg (Rabbit)	> 6 mg/L (Rat) 4 h
DIMETHYL SUCCINATE (INCI)	> 5000 mg/kg (Rat)	> 5 g/kg (Rabbit)	
2-BUTOXYETHANOL	= 470 mg/kg (Rat, 4h)	= 99 mg/kg (Rabbit)	= 450 ppm (Rat) 4 h

Sensitization
No information available.
Skin contact
May cause irritation as itching or redness.
Inhalation
Inhalation of mists may result in irritation to the respiratory tract.
Eye contact
May cause irritation as itching and redness.

Carcinogenicity
There are no known carcinogenic substances in this product.
Mutagenic Effects
There are no known mutagenic substances in this product.
Reproductive Effects
Contains substance(s) with known reproductive effects below the level for classification.

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity
Product Information
The product itself has not been tested.
Ecotoxicity effects
Contains substance(s) known to be hazardous to the aquatic environment.

Component	Toxicity to Fish	Water Flea	Toxicity to Algae
MONOPROPYLENE GLYCOL METHYL ETHER	LC50 = 20.8 g/L Pimephales promelas 96 h	23300: 48 h Daphnia magna mg/L EC50	
DIMETHYL SUCCINATE (INCI)	LC50 50 - 100 mg/L Brachydanio rerio 96 h		
2-BUTOXYETHANOL	LC50 = 1490 mg/L Lepomis macrochirus 96 h LC50 = 2950 mg/L Lepomis macrochirus 96 h	1000: 48 h Daphnia magna mg/L EC50	

12.2. Persistence and degradability
Ecotoxicological properties are substance specific, i.e. bioaccumulation, persistence and degradability. The information is given, where available and appropriate, for substance(s) of the mixture.
12.3. Bioaccumulative potential
Not likely to bioaccumulate. Component information below.

Component	log Pow
MONOPROPYLENE GLYCOL METHYL ETHER	-0.437
DIMETHYL SUCCINATE (INCI)	0.19
2-BUTOXYETHANOL	0.81

12.4. Mobility in soil
Soluble in water.
12.5. Results of PBT and vPvB assessment
The components in this formulation do not meet the criteria for classification as PBT or vPvB. As defined under the regulation EC 1907/2006.
12.6. Other adverse effects
No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
Waste from Residues / Unused Products
Dispose of in accordance with local regulations.
Contaminated Packaging
Empty remaining contents. Rinse with water. Empty containers should be taken for local recycling, recovery or waste disposal. Recycle according to official regulations.
EWC waste disposal No
The following EWC/ AVV waste codes may be applicable: . 07 06 01* aqueous washing liquids and mother liquors.
Other Information
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

SECTION 14. TRANSPORT INFORMATION

14.1, 14.2, 14.3, 14.4.

IMDG/IMO

UN-No	UN3092
Proper Shipping Name	1-METHOXY-2-PROPANOL MIXTURE
Hazard Class	3
Packing Group	III
EmS No.	F-E, S-D

ADR / RID

UN-No	UN3092
Hazard Class	3
Packing Group	III
Classification Code	F1
Limited Quantity	5 L
Transport Cat. (Tunnel Restriction Code)	3 (D/E)

IATA/ICAO

UN-No	UN3092
Hazard Class	3
Packing Group	III
ERG Code	3L

14.5. Environmental hazards
The mixture is not environmentally hazardous for transport.
14.6. Special precautions for user
No special precautions.
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Packaged product, not typically transported in IBC's
Additional information
The above information is based on latest transport regulations i.e. ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport.

SECTION 15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
This mixture was classified in compliance with EC Regulation 1272/2008 (CLP) and its adaptations.
The mixture is classified as hazardous in accordance with Directive 1999/45/EC. In addition, Directive 2009/2/EC with the 31st Adaptation of Directive 67/548/EEC (Hazardous substances) has been taken into account.
WGK Classification
Weakly water-endangering (WGK 1), Classification according VwVwS

15.2. Chemical safety assessment
No chemical safety assessment has been carried out for this mixture by the supplier

SECTION 16. OTHER INFORMATION

Text of H statements mentioned in Section 3
H226 - Flammable liquid and vapor. H302 - Harmful if swallowed. H312 - Harmful in contact with skin. H315 - Causes skin irritation. H319 - Causes serious eye irritation. H332 - Harmful if inhaled. H335 - May cause respiratory irritation. H336 - May cause drowsiness or dizziness. H360D - May damage the unborn child.
Text of R phrases mentioned in Section 3
R10 - Flammable. R36 - Irritating to eyes. R41 - Risk of serious damage to eyes. R61 - May cause harm to the unborn child. R67 - Vapours may cause drowsiness and dizziness. R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed. R36/38 - Irritating to eyes and skin. R37/38 - Irritating to respiratory system and skin.
Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]
On the basis of test data. H226 - Flammable liquid and vapor. Calculation method. H315 - Causes skin irritation. H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness.
Prepared By Austen Pimm

Creation Date 08/04/2014
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Revision Summary
CLP update
Abbreviations
REACH: Registration Evaluation Authorisation Restriction of Chemicals
EU: European Union
EC: European community
EEC: European Economic Community
UN: United Nations
CAS: Chemical Abstracts Service
PBT: Persistent Bioaccumulative Toxic
vPvB: very Persistent very Bioaccumulative
LC50: Lethal concentration, 50 percent
LD50 : Lethal dose, 50 percent
EC50: Effective concentration, 50 percent
LogPow: LogP octanol/water
VwVwS: Verwaltungsvorschrift wassergefährdende Stoffe (Administrative order relating to substances hazardous to water - Germany)
WGK: Wassergefahrdungsklasse (Water Hazard Class - Germany).
AVV: Abfallverzeichnis-Verordnung (Waste Code - Germany)
ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route (European agreement governing the international carriage of dangerous goods by road)
IMDG: International Maritime Dangerous Goods
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
RID: Reglement international concernant le transport des merchandises dangereuses par chemin der fer (Regulations concerning the International carriage of Dangerous goods by rail)
EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods
ERG: Emergency Response Guidebook
IUCLID / RTECS International Uniform Chemical Information Database / Registry of Toxic Effects of Chemical Substances
GHS: Globally Harmonised System of classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
VOC: Volatile Organic Chemical
w/w: weight for weight
DMSO: Dimethyl sulphoxide
OECD: Organization for Economic Cooperation and Development
STEL: Short Term Exposure Limit
TWA: Time Weighted Average
Further Information
It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.
Component test results displayed in sections 11 and 12 are typically supplied by Chemadvisor and assembled from publicly available literature sources e.g. IUCLID / RTECS.

Disclaimer
The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text

End of Safety Data Sheet